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ABSTRACT

The bibliography, which is one of a series of over 50 similar selected bibliographies dealing with handicapped and gifted children, contains 100 references selected from Exceptional Child Education Abstracts pertaining to research with speech handicapped children. Bibliographic data, availability information, indexing and retrieval terms, and abstracts are given for all entries, which include research reports, texts, journal articles, experimental program descriptions, and other research-related literature. Subject and author indexes to the bibliography are provided. (KW)

EC032739

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SPEECH HANDICAPPED - RESEARCH

A Selective Bibliography

February 1971

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EC 032 739

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EC032739

ABSTRACTS

ABSTRACT 10022

EC 01 0022 ED 011 154
Publ. Date 66 26p.
MacLearie, Elizabeth G.; Gross, F. P.
Experimental Programs for Intensive Cycle Scheduling of Speech and Hearing Therapy Classes.
Ohio Dept. of Education, Columbus. Div. of Spec. Educ.
EDRS mf,hc

Descriptors: exceptional child research; speech handicapped; speech therapy; articulation (speech); experimental programs; speech handicaps; program development; speech improvement; program evaluation; program improvement; scheduling; Columbus

Surveys of professional literature indicated that intensive cycle scheduling for speech and hearing therapy might yield better results than more traditional methods. Experimental programs using this new method were established in five school systems as a field test of efficiency. The four years of research in intensive cycle scheduling in these five systems resulted in several revisions in program standards presented to the State Board of Education. Each of the five studies is reported briefly with the advantages summarized and suggestions made about the length and nature of the intensive cycle scheduling of speech and hearing therapy. (DF)

ABSTRACT 10204

EC 01 0204 ED N.A.
Publ. Date Jun 66
Lerea, Louis; Ward, Blaire
The Social Schema of Normal and Speech Defective Children.
Social Psychology, Volume 69, 1966.
EDRS not available

Descriptors: exceptional child education; adjustment (to environment); speech handicapped; socialization; social relations; children; behavioral science research; social adjustment; social environment; social attitudes

Based on the assumption that social schema reflects social perception, this research study involved 20 speech handicapped and 20 normal first and second grade children matched for sex, age, intelligence, and grade level. Children were asked to place five sets of human figure cut-outs on a flannel field. Distances between family figures were measured. Results revealed that the distance between figures was significantly greater for the speech handicapped than for the normal children (p is less than .01). Children seemed to perceive each set as symbolically different and sex and interaction effects were not critical in the children's performance. A reference list includes eight items. This article was published in The Journal of Social Psychology, Volume 69, First Half, pages 87-94, June 1966. (MY)

ABSTRACT 10246

EC 01 0246 ED 018 911
Publ. Date 67 19p.
Wepman, Joseph M.; McFarland, Robert L.
Treatment of Stammering through the Use of a New Electronic Device.
Chicago Univ., Ill., Speech and Lang. Res. Lab.
EDRS mf,hc

Descriptors: exceptional child research; speech handicapped; speech therapy; stuttering; electromechanical aids; language fluency; speech improvement; instructional aids; speech habits

To determine whether a small portable instrument could be used with speech therapy to reduce stammering severity, an electronic soundmaking device was developed. Individually fitted with molded earplugs, the device was similar to a hearing aid but produced a constant tone of sufficient volume to interrupt auditory feedback during speech and thereby to reduce the circularity of nonfluency. To test the device, subjects were selected from grade school, high school, and college. Half of the subjects received biweekly 1-hour speech therapy for 6 months with the use of the aid. The remaining served as controls and received no therapy. Each of the 24 subjects was pre- and posttested with (1) four subscales of the Wechsler Adult Intelligence Scale or the same subscales of the Wechsler Intelligence Scale for Children, whichever were age appropriate, (2) the Iowa Scale of Severity, and (3) the Gray Oral Reading Test (evaluated in terms of time in seconds taken to read the assigned paragraphs). Pretests indicated no statistically significant differences between the two groups on age, intelligence, or the Gray Test and Iowa Scale. Also, posttests indicated that the Gray Test was not significant between the two groups in pre- and post-training assessment. The ratings on the Iowa Scale, however, indicated significant improvement in the experimental group (beyond the .05 level) as compared to the control group. In addition, the therapist judged 10 of the experimental subjects as improved, and the subjects themselves considered the device helpful. Further research is urged, and a schematic drawing of the aid is included. A table presents data, and a bibliography lists 12 items. (GD)

ABSTRACT 10253

EC 01 0253 ED 318 913
Publ. Date May 63 61p.
Weaver, John B.; Wollersheim, Janet P.
A Pilot Study Comparing the Block System and the Intermittent System of Scheduling Speech Correction Cases in the Public Schools.
Champaign Community Unit 4 Sch. Dist., Illinois
EDRS mf,hc

Descriptors: exceptional child research; speech handicapped; speech therapy; teaching methods; speech improvement; speech instruction; speech therapists; articulation (speech); program effectiveness; program evaluation; time blocks; school services; scheduling; pilot projects; Templin Darley Articulation Test; Illinois Typological Rating Scale

To determine the most efficient uses of the public school speech correctionist's skills and time, a study was undertaken to investigate the effectiveness of the intermittent system and the block system of scheduling speech cases. With the intermittent system the correctionist is assigned to a number of schools and generally sees children twice a week for 15 to 20 minutes. Under the block system children receive daily therapy for 3 to 6 weeks, and 1 day a week the correctionist returns to alternate schools for carryover or severe cases. The study hypothesized that articulation problems would show greater improvement with the block system, and that when articulation problems were viewed in terms of four severity groupings the block system would make greater gains. Two correctionists used the block system in five Champaign (Illinois) public elementary schools with 153 children, while four correctionists used the intermittent system in 13 schools with 243 children. None of the children was in orthopedic or mentally retarded classes. The Templin-Darley Articulation Test was administered at the opening and close of the school year, and the Illinois Typological Rating Scale with severity ratings from one to four was applied. When the two total groups were compared, speech gains of block system children were consistently and significantly greater than those of the children on the intermittent system (.01 level of confidence). Of the four severity groupings, one block system group, the second most severe, made speech gains of statistical significance (.01 level). School principals and most teachers who experienced both systems preferred the block system. Six tables, five references, and an appended score sheet are provided. (GD)

ABSTRACT 10318

EC 01 0318 ED 012 539
Publ. Date 30 Jan 67 251p.
Rees, Mary Jane
An Evaluation of Speech and Hearing Problems in the Schools, Research Problems and Capabilities of a Research Center for Resolving Issues Pertaining to School Programs.
American Speech and Hearing Assn., Washington, D.C.
OEG-32-18-0000-1026
EDRS not available

Descriptors: exceptional child research; speech therapy; speech handicapped; speech and hearing programs; speech therapists; research and development centers; research problems; articulation (speech); speech handicaps; public

schools; certification; speech tests; hearing tests; aurally handicapped; stuttering; professional training; research needs

Research is needed to determine the age at which a child with a functional articulatory disorder should begin therapy and the frequency of therapy. The authors rejected the survey method because of its many limitations. Research, using the experimental approach, was planned to screen 300,000 children, 724 of whom would be assigned to therapy, special attention, or untreated groups. Grade of beginning therapy and number of sessions would be varied. Results of the research would show whether therapy was more effective than vicarious learning and if so when and how therapy should be implemented. Noting that this experimental program was narrow in scope, the authors felt a new, more comprehensive approach was needed. Plans for the experimental program were set aside, and the authors developed a model for a research center for school speech therapists. Eight projects were undertaken to test the plan to determine if it could evolve information needed for determining standards for school speech and hearing programs. Projects involved school experience and preparation in test administration for student speech therapists, characteristics of pupils receiving speech and hearing therapy, assessment of oral communication skills, prospectus (for studies of stuttering, effects of therapy, remission of r errors, and remission of s errors), coordinated research, and teachers' ranking of children's participation in discussions. Functions of a research center are described. How such centers can encourage and aid the school speech therapist with research projects is shown. Included are a 100-item bibliography and a case record abstract form with instructions for use. (JD)

ABSTRACT 10321

EC 01 0321 ED 012 140
Publ. Date Mar 67 82p.
Templin, Mildred C.
The Identification of Kindergarten Children Least Likely to Show Spontaneous Improvement in Speech Sound Articulation. Final Report.
Minnesota Univ., Minneapolis, Inst. of Child Development
EDRS mf,hc

Descriptors: exceptional child research; speech handicapped; tests; identification; articulation (speech); speech handicaps; kindergarten children; predictive ability (testing); children; speech handicapped; kindergarten; speech therapy; prediction; screening tests; diagnostic tests; identification tests

An attempt was made to determine whether the measured articulation performance of kindergarten children could predict which children would develop satisfactory articulation and which children would continue to misarticulate and need speech therapy by the second grade. In 1960, 2150 prekindergarten and kindergarten children were given a picture articulation test and imitation articulation test. In 1962, the children were tested with an imitation articulation test, the Spencer Articulation Test, and an intelligibility rating. For each of these tests a cut-off score was set to identify approximately the same percentage of children from the test group as were receiving speech therapy in elementary schools. Results showed the percentage of girls identified by all three tests was smaller than the percentage of boys. The 1962 imitation articulation test prediction was satisfactory for boys and girls but somewhat better for girls. The 1962 Spencer Articulation Test prediction was satisfactory for boys and girls but generally better for the boys. Prediction on the 1962 intelligibility rating was not satisfactory. The hypothesis was not supported that fewer children scoring inconsistently on the 1960 tests would need speech therapy in 1962 than children who scored consistently in 1960. Included are 24 references. (MY)

ABSTRACT 10327

EC 01 0327 ED 014 169
Publ. Date 65 61p.
Wilson, Frank B.
Efficacy of Speech Therapy with Educable Mentally Retarded Children.
St. Louis Co. Special District for the Education And Training of Handicapped Children, Mo.
EDRS mf,hc

Descriptors: exceptional child research; mentally handicapped; speech therapy; articulation (speech); educable mentally handicapped; speech handicapped; speech improvement; adolescents; children; research projects; speech handicaps; speech tests; Hejna Articulation Test

A two-phase project concerned with the effectiveness of speech therapy with educable mentally retarded (EMR) children in a public school setting had two objectives--to assemble a reasonably complete picture of articulation of EMR children and to determine the value of speech therapy to EMR children with articulation deficiencies. The Hejna Articulation Tests and a speech intelligibility rating of 777 children (ages 6 to 16, IQ range 48-78) were analyzed, and the 415 speech handicapped were divided into three groups--(1) experimental, given speech therapy twice weekly, (2) control, given no therapy, (3) placebo, given general language stimulation, with no specific work on articulation sounds. Evaluation of progress was based on articulation tests given at 6-month intervals over a 3-year period. Study of subjects before therapy showed severity of articulation errors was not significant to IQ at the .01 level, but chronological age (CA) and mental age (MA) had a significant relationship to severity. Median tests revealed that differences significant at the .01 level existed between the speech handicapped and the non-speech handicapped in regard to IQ, MA, and CA. The hypothesis that the development of speech by MA levels of the retardates could closely align with the development of sounds by CA of normal children was rejected. The hypothesis that the severity of articulation handicaps is a function of MA and CA was accepted. Differences between the experimental group and the control or placebo group were not statistically significant. Speech therapy was found to have no more significant effect on sound error reduction than did maturation. Data about the relationship of sex to error reduction were not found significant. Tables present statistical findings. A 21-item reference list is included. (JB)

ABSTRACT 10469

EC 01 0469 ED 019 787
Publ. Date 66 53p.
Jensen, Paul J.
Effects of Reward and Punishment on Stuttering in Children.
Florida Univ., Gainesville, Communication Sciences Laboratory
OE-6-10-170
EDRS mf,hc

Descriptors: exceptional child research; speech handicapped; reinforcement; children; negative reinforcement; positive reinforcement; speech handicaps; stuttering; verbal stimuli

The study was designed to determine whether or not there are significantly greater latency and response durations in children's speech as a result of verbal punishment compared to reward, and whether the effects are greater in younger or older children and in boys or girls. Subjects were 160 boys and girls from third and sixth grades. During a control period subjects repeated trisyllable nonsense words produced by a recorded voice. During the differential treatment period, subjects again repeated the nonsense words. Group A received positive verbal reinforcement, and Group B received negative verbal reinforcement. Dependent variables were latency duration (time from the end of an auditory stimulus to the beginning of subject's response) and response duration (time from beginning to end of a subject's response). Independent variables were period (control and effort), condition (reward and punishment), grade (3 and 6), and sex (female and male). Analysis of variance and covariance were used to evaluate the data and revealed evidence of heterogeneity of variance so that findings may not be assumed to be related only to treatment levels or means. Conclusions were (1) intrinsic characteristics existing among children need to be isolated for maximum understanding of disfluency, (2) the general tendency in the literature to interpret adult findings as applicable to children may be unwarranted, (3) latency appears unrelated to reward and punishment for boys and girls in third and sixth grades, (4) third grade children have more disfluency (as measured by response duration) than sixth grade children in this situation, but not necessarily as a result of punishment, (5) generally, verbal punishment was associated with longer utterance than verbal reward, and (6) girls had shorter responses when rewarded and longer responses when punished as compared to males who showed no differ-

ence between conditions. A reference list cites 25 items. (MY)

ABSTRACT 10492

EC 01 0492 ED 013 013
Publ. Date 65 26p.
Garrett, Edgar Ray
Correction of Functional Misarticulation under an Automated Self-Correction System. Final Report.
New Mexico State Univ., University Park, Speech Dept.
EDRS mf,hc

Descriptors: exceptional child research; speech therapy; programed instruction; speech handicapped; articulation (speech); auditory training; teaching machines; children; auditory discrimination; speech improvement; Templin Darley Articulation Test

The Automated Speech Correction Program (ASCP) was designed to test the use of programed instruction in the remediation of functional articulation errors. A series of programed tapes which take the student through auditory identification, auditory discrimination, production, and self-evaluation were designed. Sub-goals of the experiment were a comparison of correcting (representation of a stimulus when subject responded incorrectly) and non-correcting (subject notified of error by a tone) techniques and the effectiveness of personalized subject-therapist correction or no correction between the discrimination phase and the self-correction phase. Subjects were 100 elementary school children with functional misarticulations. Subjects were assigned to varied treatment and control groups. Results indicated (1) ASCP produced improved auditory discrimination and articulation patterns as measured by the Templin Short Test of Sound Discrimination and the Templin Darley Screening Test, (2) the group which received correction of error did not demonstrate a significant difference from those who received the non-correcting presentation, and (3) there is no difference among groups which received or did not receive individualized therapy between the discrimination and self-correction phases. (EB)

ABSTRACT 10502

EC 01 0502 ED 003 086
Publ. Date 65 93p.
Frick, James W.
Evaluation of Motor Planning Techniques for the Treatment of Stuttering.

Pennsylvania State University, University Park
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-32-48-0720-5003 BR-5-0975

Descriptors: exceptional child research; speech handicapped; speech therapy; stuttering; speech handicaps; speech improvement; psychomotor skills; young adults; college students; males

Therapy procedures based on motor planning techniques were developed for the treatment of young adult stutterers. The subjects for this study were 24 male university students receiving therapy for stuttering. Using ratings of the severity of their overt stuttering, the investigators divided the subjects into an experimental group and a control group. Subjects in the experimental group were trained in the use of motor planning techniques in addition to receiving conventional therapy. Subjects in the control group received only conventional therapy. Tape recordings were made during periods of spontaneous speech by the subjects and while they read aloud at the beginning, middle, and end of the study. Subjects also completed the Stutterer's Self-Ratings of Reactions to Speech Situations at each of these three points in the study. At the end of the study, three doctoral candidates used a modified version of the Iowa Scale for Rating Severity of Stuttering to rate the severity of responses on the tape recordings. The ratings were compared with the scores obtained on the self-rating inventory. The study indicated that a group of subjects trained to use motor planning techniques in addition to receiving conventional therapy did show a greater reduction in the severity of their stuttering than a group of stutterers who received only conventional therapy. The motor planning techniques developed for use in this study can be used to help young adult stutterers form, construct, and evolve motor plans despite the presence of anticipation-anxiety. Although the techniques were felt to constitute a set of therapy procedures useful to professional workers, the conclusions should be regarded as tentative in view of the small sample of subjects and the lack of significant between-group differences. (WB)

ABSTRACT 10637

EC 01 0637 ED 024 197
Publ. Date Jan 68 357p.
Garrett, Edgar Ray
Speech and Language Therapy under an Automated Stimulus Control System.
New Mexico State University, Las Cruces
Office of Education (DHEW), Washington, D. C., Bureau of Education for the Handicapped
EDRS mf,hc
OEC-6-10-198
BR-5-0586

Descriptors: exceptional child research; programed instruction; mentally handicapped; speech therapy; learning disabilities; automation; schematic studies; aphasia; voice disorders; auditory discrimination; stimulus behavior; teaching machines; reinforcement; language handicapped; aural stimuli; articulation (speech); Templin Darley Articulation Test; Automated Stimulus Control System; ASCS

Programed instruction for speech and language therapy, based upon stimulus control programing and presented by a completely automated teaching machine, was evaluated with 32 mentally retarded children, 20 children with language disorders (childhood aphasia), six adult aphasics, and 60 normal elementary school children. Posttesting with the Templin-Darley Articulation Test showed that the Automated Stimulus Control System (ASCS) machine treatment produced non-significant results with mental retardates receiving pure tone plus M&M candy reinforcement, and significantly improved discrimination and articulation with those receiving pure tone only reinforcement (p less than .05). ASCS machine treatment produced significant changes with child aphasics (p less than .01). Following treatment, these subjects also showed improvement on the Peabody Picture Vocabulary Test, the Illinois Test of Psycholinguistic Abilities, and on word list performance. Both ASCS machine treatment and ASCS clinician-presented treatment produced significantly improved articulation with normal elementary school children (p less than .001). Adult aphasics showed no significant change, nor did retardates receiving traditonal therapy. Results indicated that significant changes in functional articulation programs occurred in 20% of the time usually required by traditional therapies. (Author/SN)

ABSTRACT 10638

EC 01 0638 ED 024 199
Publ. Date 04 Jul 68 71p.
Webster, Ronald I.
Effects of Stutterers' Self-Monitoring on Retention of Fluency Generated by Delayed Auditory Feedback. Final Report.
Hollins College, Virginia
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-2-078290-3550
BR-7-8290

Descriptors: exceptional child research; speech handicapped; speech therapy; stuttering; speech handicaps; speech improvement; auditory discrimination; auditory training; aural stimuli; audiolingual methods; theories; language fluency; speech skills; feedback; Delayed Auditory Feedback

Several experiments that manipulate stuttering by the use of delayed auditory feedback (DAF) and the prolongation of speech are reported. In a study on six severe stutterers (aged 15 to 47), self monitoring as a source of reinforcement in the use of DAF reduced stuttering frequency. Stuttering frequency was investigated with six severe stutterers (aged 14 to 28) as a function of five different intervals of DAF. Results indicated that the continuous presentation of DAF significantly improved fluency (p less than .02), that there was little difference between the various levels of DAF and that there was no lasting effect. A method for shaping fluent speech in stutterers was developed that modified the Goldiamond (1965) method by using the DAF without his special contingent relationships, that used no monitoring of reading rate, and added rate discrimination training to the fluency shaping program. Eight severe stutterers (aged 15 to 47) spent a total of 10 to 40 hours in the

program, advanced at their own rate, and had blocking levels of zero by the time they reached the conversation part of the program; the effect had lasted 6 months at the time of this report. An auditory interference theory and a reexamination of the Sutton and Chase report are presented. (Author/SN)

ABSTRACT 10808

EC 01 0808 ED 024 200
Publ. Date Feb 68 47p.
Van Riper, Charles; Erickson, Robert
Cross-Validation of a Predictive Screening Test for Children with Articulatory Speech Defects. Final Report.
Western Michigan University, Kalamazoo
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-3-7-068717-0198
BR-6-8717

Descriptors: exceptional child research; speech handicapped; tests; identification; speech therapy; test validity; elementary school students; grade 1; grade 2; grade 3; test results; student testing; speech tests; phonemes; screening tests; articulation (speech); Predictive Screening Test of Articulation; PSTA

To determine the accuracy with which the 47-item Predictive Screening Test of Articulation (PSTA) is able to identify first grade children who will master their articulation errors without speech therapy by the time they enter third grade, two groups of children were studied who were deficient enough in speech to be enrolled in therapy, but had no anatomic anomaly or were enrolled in special education classes. The basic cross-validation group had 144 children with an average of 6-6 years; the supplementary cross-validation group had 81 children with an average age of 6-7 years. The children were tested in the second month of school in 1965 (first grade), 1966 (second grade), and in 1967 (third grade), and had no therapy during this time. Results indicated that the predictive validity of the PSTA was demonstrated and that, for first grade populations similar to the basic cross-validation group, a cutoff score of 34 is optimally effective in differentiating children who will not require therapy from those who will. A 13-item bibliography, four tables, and the PSTA are included. A preliminary report is included in the ERIC system as ED 010 165. (SN)

ABSTRACT 10899

EC 01 0899 ED N.A.
Publ. Date 67 8p.
Peins, Maryann
Client-Centered Communication Therapy for Mentally Retarded Delinquents.
Rutgers University, New Brunswick, New Jersey, Douglass College
EDRS not available
Journal of Speech and Hearing Disorders; V32 N2 P154-61 May 1967
Based on A Paper Presented at the Convention of the American Speech and Hearing Association (San Francisco, 1964).

Descriptors: exceptional child research; speech handicapped; mentally handicapped; speech therapy; delinquency; institutionalized (persons); adolescents; males; speech evaluation; speech handicaps; speech improvement; educable mentally handicapped; Robert Wood Johnson Speech and Hearing Clinic

Ten mentally retarded delinquent boys between 13 and 16 were involved in client-centered communication therapy at the Robert Wood Johnson Speech and Hearing Clinic. The boys resided in a state training school for delinquent boys in Jamesburg, New Jersey, and were sentenced for offenses such as school truancy, larceny, incorrigibility, arson, and habitual running away. They were all physically healthy with no gross motor defects or dysarthria. All had normal hearing as indicated by audiometric tests. Each boy was given a battery of psychological tests. Diagnostic speech evaluations were given at the beginning and end of therapy. Initially, the boys exhibited severe communication problems such as defective articulation, delayed language development, inadequate loudness, poor voice quality, rapid rate, and stuttering. The spontaneous speech of all was poor to fair in intelligibility; vocabulary was elementary. Therapy lasted from 1 to 19 months depending on each boy's parole status. Therapy sessions were given weekly and lasted for approximately 45 minutes. The program, based on client-centered therapy, was designed to aid the boys in obtaining maximum communicative effectiveness. The therapeutic relationship was a well structured one in which there was freedom within a well defined therapy framework. A portion of each session was taped to facilitate self monitoring. At the end of the sessions clinical impressions indicated that this therapy situation resulted in varying degrees of speech improvement in communicative speech behavior and in articulation, intelligibility, rate, and loudness. (EB)

ABSTRACT 10978

EC 01 0978 ED N.A.
Publ. Date Mar 68 10p.
Prins, David; Bloomer, H. Harlan
Consonant Intelligibility: A Procedure for Evaluating Speech in Oral Cleft Subjects.
Michigan University, Ann Arbor
Children's Bureau (DHEW), Washington, D. C.
EDRS not available
C-28
Journal of Speech and Hearing Research; V11 N1 P128-37 Mar 1968

Descriptors: exceptional child research; speech handicapped; identification; speech pathology; cleft palate; speech tests; children; speech evaluation; consonants; evaluation techniques; tests; Fairbanks Rhyme Test

Since a major problem in evaluating the speech of oral cleft subjects is the lack of measures sufficiently sensitive to show a wide range of speaker ability, the study investigated the precision and validity of utilizing consonant intelligibility to assess oral cleft speech. Twenty subjects with cleft palates or palatopharyngeal insufficiency (aged 9 to 19) and normal speaking subjects (aged 10 to 12) recorded 50 randomized item word lists from the Fairbanks Rhyme Test. Twenty untrained listeners transcribed the initial consonant sounds on score sheets, which were evaluated for errors per word list and distribution and type of error as a function of consonant class. Results showed that listeners were reliable (r equals 0.88) in responding to identical tapes on different occasions and that listener responses were chiefly a function of the speaker and not the response task. Responses to oral cleft speakers yielded a higher percentage of nasal-oral consonant confusion, as compared with responses to normal speakers. Comparison of oral cleft speakers showed a wide range of speaker ability with nasal and oral consonant confusion more prevalent in speakers with poorer palatopharyngeal valve mechanisms. (JB)

ABSTRACT 10982

EC 01 0982 ED N.A.
Publ. Date Feb 68 8p.
Smith, Robert M.; McWilliams, Betty Jane
Psycholinguistic Considerations in the Management of Children with Cleft Palate.
Pennsylvania State University, University Park;
Pittsburgh University, Pennsylvania
National Institutes of Health (DHEW), Bethesda, Maryland
EDRS not available
DE-01697
Journal of Speech and Hearing Disorders; V33 N1 P26-33 Feb 1968

Descriptors: exceptional child research; speech handicapped; communication (thought transfer); language handicapped; receptive language; expressive language; psycholinguistics; cognitive tests; cleft palate; speech therapy; Illinois Test of Psycholinguistic Abilities

Research studies resulting from clinical recognition of reduced verbal output in children with clefts were reviewed; patterns of communication in children with cleft lips and/or palates were tested by administering the Illinois Test of Psycholinguistic Abilities (ITPA) to 136 cleft palate children, aged 3 to 8. At all age levels and for all types of clefts and degrees of speech skills, these children showed a general depression in all nine areas of language evaluated by the ITPA, with relatively greater weaknesses in vocal and gestural expression and in visual memory. There was a tendency for poorer performance with increased age. Explanations for this general depresssion were emotional trauma from frequent hospitalization and the defect, and the possibility of a perception deficit in cleft children. Results suggested the need for differential diagnosis of children with clefts and for treatment programs geared

to develop activities to improve expressive language. One table and six graphic profiles are given for each age level studied. (JB)

ABSTRACT 11055

EC 01 1055 ED N.A.
Publ. Date Feb 66 19p.
Canter, Gerald J.; Trost, Judith E.
The Speech Handicapped. Chapter III, Education of Exceptional Children.
Northwestern University, Evanston, Illinois
EDRS not available
Review of Educational Research; V36 N1 P56-74 Feb 1966

Descriptors: exceptional child research; speech handicapped; articulation (speech); retarded speech development; speech tests; voice disorders; stuttering; etiology; speech therapy; mentally handicapped; language ability; measurement techniques; cerebral palsy; cleft palate; medical treatment; aphasia; research reviews (publications)

Research published between July 1962 and December 1964 treating nature, diagnosis, and therapy of speech and language disorders is reviewed. Topics covered include the following: articulation disorders, including articulation testing, articulation as related to oral function and structure and to auditory and motor abilities; delayed speech and language development; voice disorders; laryngectomy; and stuttering, including measurement, etiology, and therapy. Additional studies cited treat speech and language disorders of the mentally retarded, cerebral palsy and other neuromuscular disorders, cleft palate (including incidence of cleft lip and palate), velopharyngeal adequacy and speech proficiency, surgery in relation to speech and hearing problems, and adult aphasia. A 6-page bibliography is given. (JD)

ABSTRACT 11180

EC 01 1180 ED N.A.
Publ. Date Sep 67 9p.
Shelton, Ralph L., Jr. and Others
The Relationship between Nasality Score Values and Oral and Nasal Sound Pressure Level.
Kansas University, Kansas City, School of Medicine
EDRS not available
Journal of Speech and Hearing Research; V10 N3 P549-57 Sept 1967

Descriptors: exceptional child research; speech handicapped; speech evaluation; voice disorders; cleft palate; tape recordings; tape recorders; audio equipment; microphones; audiovisual aids; rating scales; research reviews (publications); clinical diagnosis

To study the relationship of nasality scores obtained from a panel of judges and sound pressure level (SPL) readings obtained on tape recordings from nose and mouth, 29 cleft palate subjects and two normal palate subjects (aged 5 to 19 years) provided voice samples. Five second samples from oral channel recordings of subjects describing pictures were used for nasality judgments. The order of samples was randomized and played backward to 12 trained judges. Data from 15 subjects speaking with obturators in and out was examined. Subjects received lower SPL ratings when speaking with their obturators in place than when speaking with obturators removed, indicating that SPL ratings were sensitive to influences of the obturators. Nasality judgments also reflected obturator presence or absence. The relationships between nasality judgments and SPL measures were too low to warrant the use of recording apparatus in the diagnosis of nasality in clients (largest correlation coefficient was .52). The variability of these results with previous research findings is discussed. (JM)

ABSTRACT 11253

EC 01 1253 ED 026 797
Publ. Date Jan 68 39p.
Goldman, Ronald
Using the Initial Teaching Alphabet to Improve Articulation. Final Report.
Vanderbilt University, Nashville, Tennessee
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-2-3252-0450-6011
BR-6-2417

Descriptors: exceptional child research; speech handicapped; speech therapy; auditory training; preschool children; research reviews (publications); visual discrimination; initial teaching alphabet; speech improvement; articulation (speech); auditory discrimination; visual stimuli; phonemics; instructional materials; parent participation; multisensory learning; auditory tests; phonetic analysis; phonetics

Twenty-four preschool children (aged 3-3 to 5-6) were studied to test the efficacy of newly developed phonemic-visual-oral materials in the correction of articulatory problems. All subjects were given an articulation test and a battery of five tests to measure auditory memory span and intelligence. Twelve children received 50 sessions of instruction, 1 hour long, using the new materials based on the Initial Teaching Alphabet and structured to cover auditory discrimination, sound sequencing, visual discrimination, phonemic synthesis and analysis, and rhyming. A control group of 12 was exposed to traditional articulation therapy procedure. The experimental group made significantly fewer errors in articulation after therapy than the control group based on the Goldman-Fristoe Filmstrip Articulation Test (p equals .05). No significant difference was found between groups in auditory memory skills and intelligence scores. Conclusions were that the experimental, visual-symbol approach has great potential in the modification of misarticulation. (RP)

ABSTRACT 11373

EC 01 1373 ED N.A.
Publ. Date Jun 69 24p.
Darley, Frederic L. and Others
Differential Diagnostic Patterns of Dysarthria.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P246-69 Jun 1969

Descriptors: exceptional child research; speech evaluation; speech handicapped; adults; neurologically handicapped; speech pathology; motor reactions; speech skills

Thirty-second speech samples were studied of at least 30 patients in each of seven discrete neurologic groups. Three judges independently rated each of these samples on each of 38 dimensions of speech and voice using a 7-point scale of severity. Computer analysis based on the means of the three ratings on each patient on each dimension yielded results leading to these conclusions: speech follows neuroanatomy and neurophysiology, and there are multiple types or patterns of dysarthria, each mirroring a different kind of abnormality of motor functioning; these patterns of dysarthria sound different and consist of definitive groupings of certain dimensions of speech and voice, deviant to distinctive degrees; five types of dysarthria delineated were flaccid dysarthria (in bulbar palsy), spastic dysarthria (in pseudobulbar palsy), ataxic dysarthria (in cerebellar disorders), hypokinetic dysarthria (in parkinsonism), and hyperkinetic dysarthria (in dystonia and chorea), and a mixed dysarthria combining elements of flaccid and spastic dysarthrias was identified in amyotrophic lateral sclerosis. Finally, observed occurrence of a single dimension uniquely in a given neurologic disease and distinctive co-occurrence of several dimensions can aid diagnostically in identification of neurologic disorders. (Author/RJ)

ABSTRACT 11374

EC 01 1374 ED N.A.
Publ. Date Jun 69 11p.
Gerber, Sanford E.; Hertel, Christina G.
Language Deficiency of Disadvantaged Children.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P270-80 Jun 1969

Descriptors: exceptional child research; language handicapped; disadvantaged youth; retarded speech development; speech tests; speech evaluation; Illinois Test of Psycholinguistic Abilities; ITPA

This investigation examined the extent to which culturally disadvantaged children are retarded in language development compared to other children. Subjects were 53 children between the ages of 48 months and 67 months, 40 of whom were considered culturally disadvantaged. All children were given the Illinois Test of Psycholinguistic Abilities, and 50 utterances were elicited from each child. As had been hypothesized, on virtually every test the culturally disadvantaged children scored significantly lower than did the other children. (Author)

ABSTRACT 11377

EC 01 1377 ED N.A.
Publ. Date Jun 69 7p.

Williams, Dean E.; Silverman, Franklin H.
Disfluency Behavior of Elementary School Stutterers and Nonstutterers: The Consistency Effect.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P301-7 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; language rhythm; speech skills; speech habits

Each of 184 kindergarten through sixth-grade children, 92 stutterers and 92 matched nonstutterers, performed a speaking task two times consecutively. The kindergarten and first grade children repeated a series of sentences, and the second through sixth grade children read a passage. The consistency effect was observed in both groups. However, it was exhibited by a higher percentage of the stutterers than of the nonstutterers. This difference could be at least partially accounted for by the fact that the stutterers' median frequency of disfluency on the first performance of the task was much higher than that of the nonstutterers. Several implications are discussed. (Author)

ABSTRACT 11378

EC 01 1378 ED N.A.
Publ. Date Jun 69 11p.
Williams, Dean E. and Others
Disfluency Behavior of Elementary-School Stutterers and Nonstutterers: Loci of Instances of Disfluency.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P308-18 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; language rhythm; speech skills

One hundred fifty-two children from kindergarten and grades one through six, 76 stutterers and 76 nonstutterers, performed a speech task. Each of the kindergarten and first grade children repeated 10 sentences after the experimenter, and each of the second through sixth grade children read a passage. All words judged to have been spoken disfluently were analyzed for the presence of each of Brown's four word attributes: initial phoneme, grammatical function, sentence position, and word length. Disfluencies were not randomly distributed in the speech of these children. For both stutterers and nonstutterers, disfluencies occurred most frequently on words possessing the same attributes as those reported by Brown to be troublesome for adult stutterers. The findings of this study demonstrate the essential similarity in the loci of instances of disfluency in the speech of children and adults and stutterers and nonstutterers. (Author)

ABSTRACT 11387

EC 01 1387 ED N.A.
Publ. Date Jun 69 7p.
Shriner, Thomas H. and Others
The Relationship Between Articulatory Deficits and Syntax in Speech Defective Children.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P319-25 Jun 1969

Descriptors: exceptional child research; speech handicapped; articulation (speech); syntax; speech therapy; auditory discrimination; sentence structure; speech evaluation

The relationship between articulatory deficits and the development of syntax in children with severe articulation problems was investigated. Subjects in the experimental group were 30 normal elementary school children, enrolled in grades 1 through 3, who had severe problems with articulation. Thirty normal children, free from any articulation errors, served as a control group. Children with defective articulation performed significantly less well in the areas of grammatical usage, and used shorter sentences. The relationship between phonological and syntactical errors is discussed, with implications for therapy. (Author)

ABSTRACT 11388

EC 01 1388 ED N.A.
Publ. Date Jun 69 7p.
Peterson, Harold A.
Affective Meaning of Words as Rated by Stuttering and Nonstuttering Readers.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P337-43 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; semantics; word recognition

Semantic differential ratings on evaluative and anxiety scales for a set of most-stuttered and least-stuttered words were compared for nine stuttering and five nonstuttering readers, all of whom stutter while talking. No differences in word values were noted as a function of the instance of stuttering. Significant differences were noted between the two groups, however. The nonstuttering readers assigned significantly lower affective meanings than either the stuttering readers or a normal high school population. The consistency of word value ratings within both groups of readers does not support a prediction of individual word stuttering as a function of word meaningfulness. (Author)

ABSTRACT 11392

EC 01 1392 ED N.A.
Publ. Date Jun 69 6p.
Brookshire, Robert H.; Eveslage, Roberta A.
Verbal Punishment of Disfluency Following Augmentation of Disfluency by Random Delivery of Aversive Stimuli.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P383-8 Jun 1969

Descriptors: language research; language rhythm; stuttering; conditioned response; speech skills; stimulus behavior; reinforcement

Ten normal speakers read a passage, first in Random Condition, then in Contingent Condition. In each condition, subjects read in Baserate (5 minutes), Conditioning (15 minutes), and Extinction (10 minutes). During conditioning in Random Condition, subjects received a 0.75 seconds, 95 dB burst of white noise on a random schedule. During conditioning in Contingent Condition, subjects heard the word no each time they were disfluent. Disfluency increased under random noise and decreased under contingent no. The results indicate that disfluency that is established or augmented by an aversive stimulus is amenable to suppression by punishment with a different aversive stimulus. (Author)

ABSTRACT 11393

EC 01 1393 ED N.A.
Publ. Date Jun 69 5p.
Rosso, Louis J.; Adams, Martin R.
A Study of the Relationship between the Latency and Consistency of Stuttering.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P389-93 Jun 1969

Descriptors: exceptional child research; speech handicapped; stuttering; language patterns; language rhythm

Previous research indicates that the latency of learned responses is inversely related to the strength of the stimulus-response bond. If this is true for stuttering, then a word stuttered on the first of several massed oral readings should be a more potent stimulus and hence capable of promoting more consistent stuttering than other words stuttered for the first time on a subsequent reading. Within this framework, response latency is defined as the number of the reading trial on which any word is first stuttered. The present study was designed to determine whether such an inverse relationship exists between the latency and consistency of stuttering. Subjects in this investigation were 20 stutterers, each of whom was tested individually. Each stutterer read orally, five times in succession, a 320-word, neutral prose passage while the experimenter marked consistent stutterings on a separate copy of the reading material. All results demonstrated the presence of the hypothesized inverse relationship. Attention is drawn to the fact that this same association is characteristic of learned responses, thus indirectly supporting the concept that stuttering and learning are intimately related. (Author)

ABSTRACT 11399

EC 01 1399 ED N.A.
Publ. Date Jun 69 8p.
Quarrington, Bruce and Others
Goal Setting Behavior of Parents of Beginning Stutterers and Parents of Nonstuttering Children.
EDRS not available
Journal of Speech and Hearing Research; V12 N2 P435-42 Jun 1969

Descriptors: exceptional child research; stuttering; parental aspiration; parent attitudes; speech handicapped

Parents of young beginning stutterers

and parents of nonstutterers were studied to determine whether they differ in the goals they set for their children on a nonverbal task. The experiment represents a partial replication of an earlier work which studied older children with a longer stuttering duration. A group of 28 children, in which the stuttering duration did not exceed eight months, was investigated. Controls were matched for age, sex, and family occupation level. Parents were each placed in separate sound treated rooms from which they observed their child. After each set of five trials on the Rotter Board, the child's score was reported to the parents, who then were required to estimate the child's subsequent performance score. Reporting of the child's score was controlled so that each parent was exposed to a standard schedule of fixed degrees of successes and failures. The two groups of mothers differed significantly on three of the four measures considered, with the mothers of stutterers setting significantly lower goals for their children. The two groups of fathers did not differ significantly on the same four measures. Theoretical implications are considered briefly. (Author)

ABSTRACT 11433

EC 01 1433 ED N.A.
Publ. Date Mar 69 10p.
Curry, Frederick K. W.; Gregory, Hugo H.
The Performance of Stutterers on Dichotic Listening Tasks Thought to Reflect Cerebral Dominance.
EDRS not available
Journal of Speech and Hearing Research; V12 N1 P73-82 Mar 1969

Descriptors: exceptional child research; stuttering; listening skills; cerebral dominance; speech handicapped; aural stimuli; auditory perception

Forty adults, 20 stutterers and 20 nonstutterers, performed one monotic verbal listening task and three dichotic listening tasks, one verbal and two nonverbal. Left and right ear scores, as well as difference scores between the ears, were derived from each of these tests. Stutterers had smaller difference scores between ears on the dichotic verbal task than did nonstutterers. Seventy-five percent of the nonstutterers obtained higher right ear scores on the dichotic verbal task, whereas 55% of the stutterers had higher left ear scores. No differences were found between the two groups on the other tests. (Author)

ABSTRACT 11436

EC 01 1436 ED N.A.
Publ. Date Mar 69 8p.
Peterson, Harold A. and Others
A Test of Satiation as a Function of Adaptation in Stuttering.
EDRS not available
Journal of Speech and Hearing Research; V12 N1 P110-7 Mar 1969

Descriptors: exceptional child research; stuttering; adaptation level theory; word frequency; speech handicapped

To test the relationship of adaptation and satiation as hypothesized by Jakobovits, satiation of meaning as a function of repeated readings for adaptation was measured in the performance of 14 male stutterers. The subjects as a group exhibited both satiation and adaptation, but the two phenomena did not occur simultaneously in a significant number of the members of the group. A reduction in meaningfulness, as measured by the semantic differential, was not shown to be a significant factor in the reduction of stuttering frequency for the individuals in the group. Satiation and adaptation were not established as the same phenomenon, although the two may still be related through another factor. (Author)

ABSTRACT 11443

EC 01 1443 ED N.A.
Publ. Date Mar 69 6p.
Shelton, Ralph L., Jr. and Others
The Relationship Between Nasal Sound Pressure Level and Palatopharyngeal Closure.
EDRS not available
Journal of Speech and Hearing Research; V12 N1 P193-8 Mar 1969

Descriptors: exceptional child research; speech handicapped; voice disorders; prostheses; articulation (speech); speech evaluation; clinical diagnosis; medical treatment

A group of 21 subjects with well-fitted speech bulbs was compared for nasal sound pressure level (SPL) with a group of 13 subjects having moderate deficiency of palatopharyngeal closure. The difference in mean measures for the two groups was statistically significant. Correlation coefficients are reported for the relationships between nasal SPL and both a cineflurographic measure of palatopharyngeal closure and several articulation measures. (Author)

ABSTRACT 11538

EC 01 1538 ED 029 440
Publ. Date Sep 68 126p.
Shames, George H. and Others
Effects of Listening Instructions and Severity of Cleft Palate Speech on Listeners. Final Report.
Pittsburgh University, Pennsylvania
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-1-6-06-2115-1590
BR-6-2115

Descriptors: exceptional child research; speech handicapped; cleft palate; listening comprehension; verbal communication; verbal stimuli; speech skills; mothers; rating scales; test reliability; family relationship

Mothers of cleft and noncleft children (C- and non C-mothers) listened to a reading by a cleft palate child of a passage containing specified combinations of nasality and intelligibility. Groups were either uninstructed or instructed to listen to the content or the manner of speech; they assessed the nasality and intelligibility of the speaker and were given an information test on the material heard. Results were that mothers under content instructions scored higher on the content test than mothers under different instructions; however, non C-mothers scored significantly higher than C-mothers. The content score varied with the severity of the speech problem; the accuracy of rating nasality did not vary. C- and non C-mothers did not differ in accuracy of rating intelligibility and estimating the percentage of words in error, when both were under manner instructions; but C-mothers under manner instructions were more accurate on both intelligibility measures, than such mothers instructed to listen to content. (Author/JD)

ABSTRACT 11548

EC 01 1548 ED 029 449
Publ. Date Mar 69 39p.
Hull, Forrest M.
National Speech and Hearing Survey. Interim Report.
Colorado State University, Fort Collins
Office of Education (DHEW). Washington, D. C., Bureau of Education for the Handicapped
EDRS mf,hc
OEG-32-15-0050-5010
BR-5-0978

Descriptors: exceptional child research; speech handicapped; aurally handicapped; pilot projects; incidence; auditory evaluation; speech evaluation; articulation (speech); voice disorders; stuttering; sex differences; evaluation techniques; age differences; data collection; research methodology

Preliminary to a survey of a national sample of 40,000 subjects intended to estimate prevalence of speech and hearing disorders in the United States public school population, a mobile unit collected data on a pilot sample of subjects in grades 1 through 12. Speech testing of 6,290 subjects indicated about 85% had articulation which did not deviate from the Adult General American standard while less than 1% deviated extremely. A total of 5% manifested some voice deviation; 0.3% were judged stutterers; and 0.3% deviated extremely in overall speech performance. Threshold hearing data on 6,157 subjects revealed that subject reliability was generally excellent, but increased with grade level. Males showed a higher degree of reliability than females. Superior hearing sensitivity was exhibited by 91.8% of the sample, with females performing better than males in all but grade 2. Only eight of the children deviating from the superior hearing criterion were found to have bilateral impairments (.001% of the sample). The remaining 499 children had unilateral impairments which were about equally divided between the two ears, predominant in males, and well distributed among the grades. Further analysis of the data and modifications on the programing were planned to verify trends, define speech disorder, and describe hearing patterns. (Author/JD)

ABSTRACT 11549

EC 01 1549 ED 029 450
Publ. Date 23 Sep 68 32p.

Holloway, Gordon F.
A Study of the Factor Involved in Audio and Visual Coordination Affecting Language Delayed Children. Final Report.
Southern Illinois University, Carbondale
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-8-070129-1809(010)
BR-7-E-129

Descriptors: exceptional child research; language handicapped; auditory perception; visual perception; sensory integration; language development; retarded speech development; speech tests; performance tests; perception tests

The visual-auditory integrative ability of 12 language delayed children with nonspecific etiologies was compared with that of 12 normal children matched for age, sex, and IQ. A battery of tests measured auditory-visual integrative ability, visual motor ability, and perception of frequency distorted speech. Significant differences were found between the two groups in their visual-auditory integrative ability and the perception of frequency distorted speech. There was no difference between the two groups in visual motor integrative ability. Inasmuch as the two groups were significantly different for the auditory perceptual task it was difficult to determine whether the differences which exist between the two groups in the area of auditory-visual integrative skills were due to poor integration between these two modalities or due merely to the auditory component. (Author/JD)

ABSTRACT 11711

EC 01 1711 ED N.A.
Publ. Date Feb 67 10p.
Weiner, Paul S.
Auditory Discrimination and Articulation.
EDRS not available
Journal of Speech and Hearing Disorders; V32 N1 P19-28 Feb 1967

Descriptors: exceptional child research; auditory discrimination; tests; visual measures; individual tests; articulation (speech); auditory tests; research reviews (publications); age differences; test validity; speech handicapped

A review of research on the relationship between auditory discrimination and articulatory defects indicated that existing discrimination tests possess three major variables. The first variable included memory, vocabulary, context, and intelligence. More importantly, because of the nature of auditory discrimination, the validity of the tests was questioned. Validation could be achieved, however, by relating the test to a theory of auditory discrimination, if the relationship presently expected between auditory discrimination and articulation were to be found. The second variable lay in the definition and measurement of articulation defect. When subjects with only one or two errors in sounds were used, a positive relationship between auditory discrimination and articulation was never found, whereas one was found in studies where four or more errors were the criterion for inclusion. The third and most important variable was age, a positive auditory discrimination/articulation relationship being found in almost every study involving children below age 9, and in none involving only subjects above that age. It was thus recommended that longitudinal studies be made of the validity of auditory discrimination tests; both of the factors mentioned above and of the reliance upon external models; the role of maturation and learning in the development of auditory discrimination; and the methods of selecting those needing therapy. (MK)

ABSTRACT 11816

EC 01 1816 ED N.A.
Publ. Date Sep 67 9p.
Sommers, Ronald K. and Others
Factors Related to the Effectiveness of Articulation Therapy for Kindergarten, First, and Second Grade Children.
Montgomery County Schools, Norristown, Pennsylvania
EDRS not available
Journal of Speech and Hearing Research; V10 N3 P428-37 Sept 1967

Descriptors: exceptional child research; speech handicapped; speech therapy; articulation (speech); kindergarten children; grade 1; grade 2; speech improvement

To determine the degree to which articulation improvement is influenced by grade level, degree of defectiveness, stimulability responses, and amount of speech therapy, articulation therapy was administered by 20 speech clinicians to 288 suburban school children. Articulation was tested before and after the eight and one-half month treatment period, using the Warnock-Medlin cards, a version of the McDonald deep test of articulation, and the Carter-Buck Prognostic Test. Effectiveness of therapy was not dependent on grade or severity of defect. Subjects with poor stimulability scores derived significantly more benefits from therapy than those with good stimulability scores (p less than .001). Kindergarten subjects with more severe speech problems showed significantly more improvement in articulation than second graders with similar defects (p less than .001). In deciding which children should be accepted for treatment, conclusions were that children from kindergarten, first, and second grades with poor stimulability scores will benefit more from speech therapy than those with good scores and that speech therapy is effective for these children regardless of the severity of their speech problems. (JB)

ABSTRACT 11818

EC 01 1818 ED N.A.
Publ. Date Sep 67 18p.
MacNeilage, Peter F. and Others
Speech Production and Perception in a Patient with Severe Impairment of Somesthetic Perception and Motor Control.
Haskins Laboratories, New York, New York;
Johns Hopkins University School of Medicine, Baltimore, Maryland, Neurocommunications Laboratory
National Institute of Child Health and Human Development (DHEW), Washington, D. C.;
Vocational Rehabilitation Administration (DHEW), Washington, D. C.;
National Institute of Dental Research (DHEW), Washington, D. C.
EDRS not available
PH-43-65-637
RD-1899-S;PHS-RG-DE-01774
Journal of Speech and Hearing Research; V10 N3 P449-67 Sept 1967

Descriptors: exceptional child research; speech handicapped; perception; diagnosis and evaluation; auditory discrimination; auditory perception; perceptual motor coordination; psychomotor skills; physiology; sensory experience

Studies were made of speech and other motor behavior of a 17-year-old female with chronic difficulties in swallowing, chewing and speaking to characterize in detail the patient's speech production and relate results to other information in order to ultimately specify the nature of the deficit. The patient exhibited a general deficit in control of complex voluntary movements, characterized by lack of temporal and spatial differentiation of motor activity, and was unable to activate the several muscles required for any given speech gesture while independently controlling their various patterns of activity in a normal fashion. It was concluded that this difficulty resulted from congenital inability to obtain somesthetic information necessary for learning patterns of spatial distribution and temporal modulation of muscle contraction for normal speech. With auditory stimulation she was unable to produce even moderately intelligible speech. Despite the severely limited speech production, speech perception approached normality in aspects of vowel and consonant identification indicating that motor information is not necessary for these types of discrimination. (Author/JB)

ABSTRACT 11822

EC 01 1822 ED N.A.
Publ. Date Sep 67 9p.
Barnes, Ida Jones; Morris, Hughlett L.
Interrelationships among Oral Breath Pressure Ratios and Articulation Skills for Individuals with Cleft Palate.
Iowa University, Iowa City
National Institute of Dental Research (DHEW), Washington, D. C.
EDRS not available
PHS-RG-DE-00853
Journal of Speech and Hearing Research; V10 N3 P506-14 Sept 1967
Portions of Paper Presented at the Annual Convention Of the American Speech and Hearing Association (41st, Chicago, Illinois, 1965).

Descriptors: exceptional child research; speech handicapped; articulation (speech); cleft palate; cleft lip; speech evaluation; speech tests; clinical diagnosis

To provide information about the relationships among various manometer ratios and measures of articulation skill interrelationships among four breath pressure ratios, measures of articulation proficiency (articulation tests, speech sound stimulability scores, recorded connected speech), age, intelligence, and hearing acuity were computed for 85 children from 4 to 18 years who had cleft lip and/or palate. Of the breath pressure ratios, the one based on positive readings with bleed was related highest to, and was considered to be the best predictor of, articulation skills (p less then .01). Of the measures of articulation skill, the plosive-elements test and the stimulation test correlated most highly with the pressure ratios (p less than .01). The stimulation score was the measure which correlated highest with both articulation and pressure ratios (r equals .92) and was considered to most clearly reflect ability to achieve velopharyngeal closure in speech. Indications were that use of an index of stimulability in predicting the outcome of speech therapy for individuals with velopharyngeal problems seems warranted. (Author/JB)

ABSTRACT 11911

EC 01 1911 ED N.A.
Publ. Date Dec 67 4p.
Bloodstein, Oliver; Gantwerk, Barbara F.
Grammatical Function in Relation to Stuttering in Young Children.
EDRS not available
Journal of Speech and Hearing Research; V10 N4 P786-9 Dec 1967

Descriptors: exceptional child research; stuttering; speech handicapped; language rhythm; language patterns; sentence structure; form classes (languages); function words; age differences

Samples of the speech of 13 stutterers from 2 to 6 years of age were studied to determine to what extent the distribution of stutterings was related to the grammatical functions of words. The findings were markedly different from those reported on older stutterers. For the most part the stutterings were randomly distributed with respect to the grammatical factor, but there was a tendency for stuttering to occur unusually often on pronouns and conjunctions and less often on nouns and interjections. The excessive stuttering on pronouns and conjunctions appeared to be largely the effect of the high frequency of stuttering on the first word of the sentence. It was concluded that a true grammatical factor does not exist in the initial phase of stuttering, and probably emerges only with the emergence of difficult words. (Author)

ABSTRACT 11912

EC 01 1912 ED N.A.
Publ. Date Dec 67 5p.
Silverman, Franklin H.; Williams, Dean E.
Loci of Disfluencies in the Speech of Stutterers During Oral Reading.
EDRS not available
Journal of Speech and Hearing Research; V10 N4 P790-4 Dec 1967

Descriptors: exceptional child research; stuttering; performance factors; language patterns; language rhythm; average students; speech handicapped; sentence structure; morphemes; phonemes

To determine whether disfluencies in the speech of nonstutterers occur most frequently on words possessing the four linguistic attributes reported to be related to the occurrence of stutterings by stutterers (Brown, 1945), 24 male nonstutterers (aged 18 to 34) read the same 1,000-word passage used with those stutterers. All words judged to have been spoken disfluently, a total of 226, were analyzed for the presence of four word characteristics: initial phoneme a consonant other than /t/, /h/, /w/, or /th/; grammatical function that of a noun, verb, adverb, or adjective; sentence position among the first three words; word length five letters or more. Results indicated disfluencies were not randomly distributed in the speech of these nonstutterers, but occurred most frequently on words possessing the same attributes (except word position) as the words on which the stutterers stuttered. The study thus demonstrated the essential similarity of the loci of the normal speaker's disfluencies and the stutterer's stutterings. (Author/GD)

ABSTRACT 11913

EC 01 1913 ED N.A.
Publ. Date Dec 67 7p.
Quist, Raymond W.; Martin, Richard R.
The Effect of Response Contingent Verbal Punishment on Stuttering.
EDRS not available
Journal of Speech and Hearing Research; V10 N4 P795-801 Dec 1967

Descriptors: exceptional child research; stuttering; behavior change; verbal operant conditioning; stimulus behavior; verbal stimuli; negative reinforcement; speech improvement; speech handicapped

The effects of presenting the verbal stimulus, wrong, contingent on stuttering were studied in three adult male stutterers. Each subject's stuttering baserate was obtained, then the word, wrong, was made contingent on each stuttering. For two subjects, the verbal punishment, wrong, occasioned a 30 to 40% reduction in stuttering frequency. For the third subject, verbal punishment produced almost total suppression of stuttering, its removal was followed by a return to baserate frequency, and its reintroduction resulted in an immediate and substantial reduction in stuttering. (Author/GD)

ABSTRACT 11914

EC 01 1914 ED N.A.
Publ. Date Dec 67 10p.
Soderberg, George A.
Linguistic Factors in Stuttering.
EDRS not available
Journal of Speech and Hearing Research; V10 N4 P801-10 Dec 1967

Descriptors: exceptional child research stuttering; speech handicapped; form classes (languages); sentence structure language rhythm; phonemics; psycholinguistics; language patterns

Ten stutterers recorded a 141 word passage in the presence of a single listener. The words in the passage were classified as lexical or function words and pronouns, and high information or low information words. In addition, unitary stutterings were classified as either prolongations or repetitions. The linguistic factors, stutterings, and stuttering types were analyzed with respect to initial, medial, and final positions of words in phonemic clauses and total words in the clauses. The findings supported the contention that stuttering is related to the encoding processes of speaking. It was hypothesized that the phonemic clause operates as an encoding unit in speaking and both grammatical and lexical uncertainty play roles in eliciting the instance of stuttering and type of stuttering instance. (Author)

ABSTRACT 11916

EC 01 1916 ED N.A.
Publ. Date Dec 67 8p.
Lanyon, Richard I.
The Measurement of Stuttering Severity.
EDRS not available
Journal of Speech and Hearing Research; V10 N4 P836-43 Dec 1967

Descriptors: exceptional child research; stuttering; rating scales; speech evaluation; clinical diagnosis; measurement instruments; behavior; attitudes; speech handicapped

A written inventory was constructed to assess the severity of stuttering. Six judges, of whom five were stutterers, four were speech pathologists, and all had bachelor's degrees, selected true/false statements to discriminate between nonstutterers and stutterers, and among mild, moderate, and severe stutterers. This inventory of behaviors and attitudes related to stuttering was administered to 50 normal university students (mean age 19.4) and 50 stutterers attending college connected speech clinics (mean age 22.5). The severity of the stutterers' speech problems was also rated by a clinician on a seven-point scale. Of the 120 items pertaining to stuttering, 64 discriminated between stutterers and normals and also among the three levels of stuttering severity; preliminary cross validation data showed that the wide range of scores for stutterers and the large mean difference between stutterers and nonstutterers were stable phenomena of the scale. The 64-item scale is provided. (GD)

ABSTRACT 11976

EC 01 1976 ED 031 008
Publ. Date 01 Feb 69 12p.
Tikofsky, Rita
A Study of Intelligibility of Dysarthric Speech; Studies in Language and Language Behavior. Progress Report VIII.

Michigan University, Ann Arbor, Center for Research On Language and Language Behavior

Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-3-6-061784-0508
BR-6-1784

Descriptors: exceptional child research; speech handicapped; tests; articulation (speech); identification; evaluation criteria; measurement techniques; speech tests; listening comprehension; classification; speech skills; word lists

To explore the adequacy of a 50-word list, produced by item analysis of a set of 160 words in an earlier study, also by Tikofsky, tape recordings of 20 adult dysarthrics reading the list were evaluated by university students who were native speakers of English and had no history of hearing loss. Results of the intelligibility study showed that the dysarthrics could be categorized according to their responses into four groups. The results also indicated that certain words presented more difficulty for some types of dysarthria than others. It was concluded that the 50-word list is an efficient and accurate means of testing dysarthrics before and after speech therapy. Tables provide biographical data on the patients, their itemized test responses, and correlations between test performance and nature of impairment; the 50-word list is also appended. (Author/JD)

ABSTRACT 12042

EC 01 2042 ED N.A.
Publ. Date Sep 69 35p.
Darley, Frederic L. and Others
Clusters of Deviant Speech Dimensions in the Dysarthrias.
EDRS not available
Journal of Speech and Hearing Research; V12 N3 P426-96 Sept 1969

Descriptors: exceptional child research; speech handicapped; neurologically handicapped; voice disorders; articulation (speech); language rhythm; language patterns; neurological organization; physiology

Correlation matrices were used to demonstrate co-occurrence of deviant speech dimensions observed. Application of this technique led to the emergence of eight distinctive clusters of dysfunction. Each of seven neurologic disorders studied had its own unique group or patterns of clusters. However, any one cluster emerged in and was shared by more than one disorder. Inspection of the dimensions present in a cluster permitted giving the cluster a logically determined name based usually on the defective physiology responsible for the cluster. Knowledge of the neuromuscular characteristics of each disorder led to deductions concerning the neuromuscular substrate for each cluster. Intercluster correlations yielded clues concerning co-occurrence of certain neuromuscular defects. Further inspection led to identification of the probable neuromuscular bases of individual deviant speech dimensions. These conclusions may serve as hypotheses for more accurate physiologic and neurophysiologic measurements to further delineate the problems of dysarthria. (Author)

ABSTRACT 12046

EC 01 2046 ED N.A.
Publ. Date Sep 69 17p.
Powell, Judith; McReynolds, Leija
A Procedure for Testing Position Generalization from Articulation Training.
EDRS not available
Journal of Speech and Hearing Research; V12 N3 P629-45 Sept 1969

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; speech tests; speech improvement; training techniques

Generalization was repeatedly tested in individual children during an articulation training program which progressed in phases from isolated sound training to medial position training using nonsense syllables and, if necessary, words. Four children who misarticulated the /s/ in initial, final, and medial positions in words comprised the population of the study. If complete generalization on 12 test probes had not occurred after three phases of nonsense syllable training, three additional phases (initial, final, and medial position) of word training were administered. Training was terminated when complete generalization had occurred or all phases of the program had been administered. Two children generalized completely at the end of nonsense syllable training, one child generalized after nonsense syllable training, word training, and instructions, and the fourth child did not generalize completely by the end of the study. Although the correctly articulated /s/ began to control the children's responses in untrained contexts, the results showed that position generalization was not a function of the position training. As the children progressed through the program, generalization increased, but sometimes failed to stabilize on specific items from phase to phase. (Author)

ABSTRACT 12056

EC 01 2056 ED N.A.
Publ. Date Mar 67 7p.
Wingate, M. B.
Stuttering and Word Length.
EDRS not available
Journal of Speech and Hearing Research; V10 N1 P146-52 Mar 1967

Descriptors: exceptional child research; stuttering; syllables; phonetics; structural analysis; speech handicapped

To test the hypothesis that more stuttering would occur on longer words in isolation than on short words of equivalent phonetic structure, 14 young adult male stutterers read two word lists aloud. One list consisted of 30 pairs of one-syllable words and the other list of 30 phonetically comparable two-syllable words. Half of each list contained common words; the other half unfamiliar words. Results indicated significantly more stuttering on two-syllable words (p equals .01). Stuttering occurred on the initial sound of words and there was more stuttering on less familiar words. Findings suggest that longer words are more difficult because they require a more complex pattern of motor coordination and planning, and that the association of stuttering with certain structural and grammatical properties reflects the influence of physiological more than psychological variables. (RJ)

ABSTRACT 12071

EC 01 2071 ED 010 165
Publ. Date 66 75p.
Van Riper, Charles
A Predictive Screening Test for Children with Articulatory Speech Defects.
Western Michigan University, Kalamazoo
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-1538
BR-5-0399

Descriptors: exceptional child research; speech handicapped; identification; speech tests; predictive measurement; test construction; speech improvement; articulation (speech); grade 1; rating scales; test validity; elementary school students; speech evaluation

A test to identify defective articulation in first grade children was constructed using the empirical scale derivation method to seek test items for the prediction of articulatory maturation. After selection and reduction to 135 items, an experimental item pool was administered to 167 beginning first-grade children who had been diagnosed as having functionally defective articulation. Requests were made that none of the subjects receive therapy during the study period. The subjects were classified in the beginning of the second grade as having still defective or normal articulation. This was done also at the third-grade level. Item analyses were performed to identify items which differentiated the groups. A response record sheet was individually scored with the keys derived empirically, the resultant frequency distributions of scores were analyzed, and possible cut-off scores were established. (RS)

ABSTRACT 20008

EC 02 0008 ED N.A.
Publ. Date Jun 67 7p.
Neelley, James N.; Timmons, Roy J.
Adaptation and Consistency in the Disfluent Speech Behavior of Young Stutterers and Nonstutterers.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P250-6 Jun 1967

Descriptors: exceptional child research; speech handicapped; stuttering; word frequency; adaptation level theory; language patterns

Thirty stutterers and 30 nonstutterers, aged 5 to 8 years, were studied with regard to the adaptation and consistency phenomena in their disfluent speech behavior. A set of seven sentences was repeated five times by each subject, and a frequency count of disfluent words

obtained. Adaptation and consistency occurred in both stuttering and nonstuttering groups, but the levels and patterning of the phenomena differed somewhat. A more regular adaptation trend was shown by the stutterers (p equals .05). Despite lack of significant individual consistency measures for the young stutterers, there was a relatively high frequency of consistency (50% or more), suggesting a development toward nonchance loci of fluencies, or adult stuttering phenomena. (EB)

ABSTRACT 20009

EC 02 0009 ED N.A.
Publ. Date Jun 67 5p.
Martin, Richard R.; Haroldson, Samuel K.
The Relationship Between Anticipation and Consistency of Stuttered Words.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P323-7 Jun 1967

Descriptors: exceptional child research; speech handicapped; attitudes; stuttering; adults; task performance; performance factors

Prior to oral reading of a 300-word selection, 30 adult stutterers rated expectation of stuttering for each word. Subjects then read the selections aloud five times. The results showed a higher percentage of stuttering on words assigned high expectancy values than on words assigned low expectancy values. When words were grouped according to consistency of stuttering, words stuttered less consistently had lower expectancy values than words stuttered more consistently. However, in over one-half of those instances where subjects predicted they would definitely stutter, they did not stutter on the first reading. With respect to fluent words, there was no apparent relationship between assigned expectancy value and the consistency of fluency. (EB)

ABSTRACT 20011

EC 02 0011 ED N.A.
Publ. Date Jun 67 6p.
Smith, Myrna W.; Ainsworth, Stanley
The Effects of Three Types of Stimulation on Articulatory Responses of Speech Defective Children.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P333-8 Jun 1967

Descriptors: exceptional child research; speech handicapped; articulation (speech); pictorial stimuli; aural stimuli; testing; evaluation methods

To determine whether the method of testing articulation influences the number of observed errors, 40 first-graders with defective articulation were tested on 10 consonant sounds. Three different methods were used, including picture stimulus, auditory stimulus, and auditory-visual stimulus. Results indicated that, generally, the picture stimulus resulted in the greatest number of errors and the auditory-visual method, where the subject observed and heard the examiner say the word, resulted in the fewest errors. (EB)

ABSTRACT 20012

EC 02 0012 ED N.A.
Publ. Date Jun 67 4p.
Wingate, M. E.; Hamre, C. E.
Stutterers' Projection of Listener Reaction.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P339-42 Jun 1967

Descriptors: exceptional child research; speech handicapped; stuttering; attitudes; self concept

To investigate the notion that stutterers tend to project their feelings onto listeners, a group of 20 young adult male stutterers and 20 nonstutterers matched for age and educational level were shown filmed segments of 10 persons reported to be listening to individual speakers. The filmed listeners, who actually were not listening to anyone, made occasional minor movements but no marked facial expressions or bodily movements. The subjects identified each of the filmed listeners as listening to a stutterer or nonstutterer or said they could not tell; all wrote descriptions of what they thought the listener felt towards the speaker. The results showed that the stutterer's identifications and descriptions of the listeners' reactions were not significantly different from those of nonstutterers. Both groups gave more favorable listener-attitude descriptions when they identified the unseen speaker as a nonstutterer, and less favorable descriptions for attitudes of those whom they identified as listening to stutterers. (EB)

ABSTRACT 20013

EC 02 0013 ED N.A.
Publ. Date Jun 67 6p.
Smith, Curtis R.
Articulation Problems and Ability to Store Process Stimuli.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P348-53 Jun 1967

Descriptors: exceptional child research; speech handicapped; cognitive processes; articulation (speech); recall (psychological); retention; memory; learning characteristics

Short term storage of auditory and speech stimuli was studied in 12 children with normal speech and 12 children with nonorganic mild to severe articulation problems (ages 6 to 8.8, IQ's normal). Each subject was individually tested for recall of digits (single, sequential, and simultaneous sets) and recall of bead patterns. The speech handicapped group recalled significantly fewer digits (p equals .01) than did the controls in both immediate and delayed recall for all three digit sets. There were no significant differences between the two groups regarding short-term storage with the bead pattern recall test, nor was there correlation between digits recalled and severity of articulation problem. Further research on the short term storage abilities of children with nonorganic articulation problems was recommended since defects in this process could account for faulty articulation. (EB)

ABSTRACT 20017

EC 02 0017 ED N.A.
Publ. Date Jun 67 4p.
Sherman, Dorothy; Geith, Annette
Speech Sound Discrimination and Articulation Skill.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P277-80 Jun 1967

Descriptors: exceptional child research; speech handicapped; tests; articulation (speech); auditory discrimination; auditory tests; speech tests; intelligence tests; testing; kindergarten children

To relate differences in articulation skills to differences in sound discrimination ability, over 500 kindergarten children were tested with the Templin Speech Sound Discrimination Test; of these, two experimental groups, consisting of 18 subjects with high scores and 18 subjects with low scores, were selected to receive the Templin-Darley Picture Articulation Test. Scores for the group ranking high on the sound discrimination test were high on the articulation test; for the other group the scores were low (beyond the .001 level of significance for both). Thus a causal relationship between discrimination ability and poor articulation ability was recommended. Although the Peabody Picture Vocabulary Test indicated a mean IQ of 122.6 for the high group and 103.5 for the low group (beyond the .001 level of significance), this difference was attributed not to the difference in articulation, but rather to the method and criterion for selecting the high group and the likelihood of confusion of words by children who are poor at sound discrimination. (EB)

ABSTRACT 20018

EC 02 0018 ED N.A.
Publ. Date Jun 67 8p.
Shelton, Ralph L., Jr.; Arndt, William B., Jr.
A Task for Evaluation of Articulation Change.
EDRS not available
Journal of Speech and Hearing Research; V10 N2 P281-8 Jun 1967

Descriptors: exceptional child research; speech handicapped; speech therapy; tests; articulation (speech); test construction; test validity; measurement instruments; speech improvement

In order to examine the feasibility of measuring articulation change from lesson to lesson, a brief 60-item test was devised and administered prior to the first session and at every second lesson. Seven subjects, aged 6 to 8 years, with consistently misarticulated /s/, /z/, and /r/ phonemes, were given speech therapy only for the /s/. It was predicted that this would result in improvement of the /s/ sound and its cognate /z/ but not the phonetically dissimilar /r/. A maximum of 20 half-hour lessons was given within an 11-week period; lessons were discontinued if a subject made from 18 to 20 correct responses out of 20 possible.

With 85 the mean percentage of agreement among the judges, two of the three subtests were found reliable at the .01 level of significance and the third at .05. Differences significant at the .01 level existed between difference scores for /r/ and /s/ and for /r/ and /z/; differences reflecting articulation improvement were greater for /s/ and /z/ than for /r/. Also a 223-item test was administered, before and after the complete series, (with p less than .001). The short test was found valid and sensitive to changes in articulation skill that occur in a lesson or two. (EB)

ABSTRACT 20100

EC 02 0100 ED N.A.
Publ. Date Feb 69 18p.
Shames, George H. and Others
Experimental Programs in Stuttering Therapy.
EDRS not available
Journal of Speech and Hearing Disorders; V34 N1 P30-47 Feb 1969

Descriptors: exceptional child research; speech handicapped; stuttering; behavior change; negative reinforcement; positive reinforcement; operant conditioning; speech therapy; experimental programs; reinforcement

Rationale and development are described for two types of therapeutic programs in stuttering, based on operant conditioning. The Stuttering Behavior Program attempts to modify the symptomatic features of stuttering by means of verbal consequences. The stutterer performs an assigned symptom modification task, and is reinforced for successful completion or punished for failure by means of the clinician's verbal response. The Thematic Content Modification is based on a categorization of stutterers' verbal responses: positive or those beneficial to therapy; negative or those incompatible with recovery. The program strives to increase frequency of positive and decrease negative thematic responses during interviews. After application of these programs, tentative conclusions were reached: stuttering rate was reduced; rates of operant responses increased; frequency of stuttering and observed thematic content appeared to co-vary. Assignment of patients to either program appears to be warranted. Further research on rates and types of responses is planned. (JB)

ABSTRACT 20140

EC 02 0140 ED N.A.
Publ. Date Aug 69 6p.
Curlee, Richard F.; Perkins, William H.
Conversational Rate Control Therapy for Stuttering.
EDRS not available
Journal of Speech and Hearing Disorders; V34 N3 P245-50 Aug 1969

Descriptors: exceptional child research; speech handicapped; stuttering; operant conditioning; feedback; speech therapy; reinforcement; speech improvement

Conversational Rate Control Therapy, a behavior therapy for stuttering, is described. During normal conversation the patient is conditioned with delayed auditory feedback until he has reached a no-stuttering level. To insure voluntary rate control and phrasing, the client is given time-out (a penalty) each time he stutters or speaks too fast. After attaining voluntary rate control, the client undergoes site and social complexity successive approximation procedures. He is given opportunities to try new speech with a variety of persons and situations, beginning with the least difficult. Subjective clinical impressions indicate that most clients have achieved, in the laboratory at least, speech within normal limits of rate, fluency, and prosody. Further research is needed to refine the techniques currently employed in the therapy, and to assess the permanence of change and amount of generalization of change in stuttering. (Author/JB)

ABSTRACT 20172

EC 02 0172 ED 031 840
Publ. Date Oct 68 61p.
Prins, David T.; Lohr, Francis E.
A Study of the Behavioral Components of Stuttered Speech.
Michigan University, Ann Arbor
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-3-6-062382-1882
BR-6-2382

Descriptors: exceptional child research; speech handicapped; stuttering; speech evaluation; factor analysis; film study; data collection; physical characteristics; classification; speech habits; videotape recordings; evaluation techniques

Selected visible and audible features of stuttered speech were studied to determine whether these phenomena suggested a basis for differentiation among stutterers. Forty-six visible and audible phenomena of stuttering were examined in 23 stutterers, using a frame-by-frame analysis of sound motion picture film. Significant inter-subject differences were found in 11 of these variables which included the following: adaptation, number of film frames in the moment of stuttering, simultaneous suspension of jaw and lip activity, eyelid closure, eyelid movement, total visible tension, number of anatomical areas involved in the movement, and several indices of unilateral facial deviations. A factor analysis of the correlations among audible and visible variables revealed 10 factors which accounted for 83% of the variance. Six of these factors were similar to stuttering dimensions which previouly had been implied or hypothesized, but had not been empirically derived; overall stuttering severity, type of audible dysfluency, adaptation, type of unilateral deviation, tension, and stuttering differences between spontaneous speech and reading. Applications are presented of the results of this study to the differentiation and classification of stutterers. (Author/RD)

ABSTRACT 20198

EC 02 0198 ED 031 866
Publ. Date 31 Mar 69 75p.
Sommers, Ronald K.
Factors in the Effectiveness of Articulation Therapy with Educable Retarded Children. Final Report.
Montgomery County Schools, Norristown, Pennslyvania
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-1-7-07342-3544
BR-7-0432

Descriptors: exceptional child research; mentally handicapped; articulation (speech); speech therapy; speech handicapped; educable mentally handicapped; speech evaluation; speech tests; speech improvement

To determine the effectiveness of group articulation therapy, 180 educable retarded children in special classes (average age 9, average IQ 70), all of whom had articulation problems, were rated on the Carter/Buck Prognostic Speech Test and a picture version of McDonald's deep test of articulation. Subjects were then randomly assigned to one of three groups: no therapy, therapy for 30 minutes once a week for 9 months, or therapy for 30 minutes four times weekly for 9 months. Posttests were administered immediately after 9 months and again 3 months later. Results on the picture deep test indicated that subjects who received therapy four times weekly improved significantly, whereas subjects who had therapy once a week did not. On the picture articulation test, however, no significant differences were found between experimental groups. At the time of the second posttesting, the picture articulation improvements by the subjects who had therapy four times weekly were maintained as were the respective positions of subjects in the three groups. Significant relationships were also found between mental age and IQ and articulation improvement during therapy. (JD) (not available in hardcopy due to marginal legibility of original document.)

ABSTRACT 20506

EC 02 0506 ED N.A.
Publ. Date Aug 66 8p.
Wingate, M. E.
Stuttering Adaptation and Learning: II. The Adequacy of Learning Principles in the Interpretation of Stuttering.
EDRS not available
Journal of Speech and Hearing Disorders; V31 N3 P211-8 Aug 1966

Descriptors: exceptional child research; speech handicapped; stuttering; learning theories; behavior patterns; anxiety; behavioral science research; research reviews (publications); reactive behavior; operant conditioning; adaptation level theory; reinforcement

The article is the second in a series discussing whether or not learning theory principles adequately account for the development of stuttering. Data gained from studies of adaptation in stuttering have been used as support for various hypotheses of stuttering as a learned anticipatory avoidance behavior. The author states that the anxiety associated

with anticipation should result in increased stuttering, but that adaptation studies have shown a decrease in stuttering. The theory is, therefore, inconsistent with the facts. Similarly, a discussion of such models of learning theory as instrumental avoidance learning, instrumental escape learning, and operant learning reveal limitations in their ability to account for stuttering. The author concludes that stuttering is not a learned behavior. (MK)

ABSTRACT 20597

EC 02 0597 ED N.A.
Publ. Date Feb 63 18p.
Ainsworth, Stanley
The Speech Handicapped.
Georgia University, Athens
EDRS not available
Review of Educational Research; V33 N1 P20-37 Feb 1963

Descriptors: exceptional child research; speech handicapped; incidence; research methodology; tests; language development; articulation (speech); stuttering; aphasia; cerebral palsy; cleft palate; voice disorders

Journal articles on research monographs on the speech handicapped that appeared between June 1959 and June 1962 are reviewed. Among the subjects treated are incidence, testing and research techniques, language development, articulatory disorders, voice disorders, stuttering, aphasia, cerebral palsy, laryngectomy, cleft palate, and speech problems related to other disorders. Miscellaneous contributions, speech science, and trends in research are also surveyed. A bibliography cites 126 items. (EB)

ABSTRACT 20964

EC 02 0964 ED 033 504
Publ. Date Jun 69 71p.
Pendergast, Kathleen and Others
A Study of Protrusional Lisps to Identify Children Requiring Speech Therapy.
Seattle Public Schools, Washington
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-5-10-180
BR-5-0319

Descriptors: exceptional child research; articulation (speech); prediction; speech improvement; speech skills; speech tests; performance factors; speech handicapped; kindergarten children; primary grades; performance factors; speech evaluation; speech therapy

To determine factors influencing the permanency of a protrusional lisp and to incorporate them into predictive profiles, approximately 8,000 kindergarten children were screened for articulation and those appearing to have a protrusional lisp were tested individually. The 1,043 subjects exhibiting such a lisp were examined semiannually for 4 years with a battery of speech and other tests; their school records were assessed; no speech therapy was given. The data for the 475 subjects who remained, based on recovery and nonrecovery by the end of grade 3, were formulated into seven profiles, one for each testing period. The pattern indicated that no single test or subtest proved to be predictive at all periods. Results demonstrated a consistent increase in the number of subjects recovering, with 56% recovering without therapy. Higher recovery rates were found among subjects with a protrusional lisp only or with less severe articulation problems initally and more rapid reduction of errors throughout. Also, subjects producing (t,d,n,), with the tongue tip and not the blade had a better chance to recover without therapy. (Author/JD)

ABSTRACT 21013

EC 02 1013 ED N.A.
Publ. Date Jun 66 7p.
Sommers, Ronald K. and Others
The Effectiveness of Group and Individual Therapy.
Montgomery County Schools, Norristown, Pennsylvania
EDRS not available
Journal of Speech and Hearing Research; V9 N2 P219-25 Jun 1966

Descriptors: exceptional child research; group therapy; speech handicapped; speech therapy; articulation (speech); speech improvement

Articulation therapy was administered to 240 children by 17 speech clinicians working in a suburban school system. Articulation testing was completed both before and after an 8 and 1/2 months' treatment period. Group therapy was found to be as effective as individual therapy, regardless of the severity of speech defectiveness or grade levels of the children. (Author)

ABSTRACT 21045

EC 02 1045 ED N.A.
Publ. Date Dec 69 10p.
Wingate, M. E.
Sound and Pattern in Artificial Fluency.
EDRS not available
Journal of Speech and Hearing Research; V12 N4 P677-86 Dec 1969

Descriptors: exceptional child research; speech handicapped; stuttering; speech improvement; oral expression; speech therapy; research reviews (publications)

This paper presents an analytic review of many conditions known to induce fluent speech in stutterers, and derives an integral explanation which accounts for the beneficial effect of all of them. This explanation suggests new avenues of approach to basic research in stuttering as well as pointing up the value of reviving areas of exploration initiated, but abandoned, a number of years ago. (Author)

ABSTRACT 21047

EC 02 1047 ED N.A.
Publ. Date Dec 69 14p.
Erickson, Robert L.
Assessing Communication Attitudes Among Stutterers.
EDRS not available
Journal of Speech and Hearing Research; V12 N4 P711-24 Dec 1969
Paper Drawn From A Doctoral Dissertation Completed Under the Direction of Dorothy Sherman.

Descriptors: exceptional child research; speech handicapped; stuttering; speech improvement; communication problems; testing; self evaluation; counselor evaluation

The responses given to each of 466 Communication Inventory items by a group of 100 nonstutterers were contrasted with those given by a criterion group of 50 stutterers. A scale of communication attitudes (S-scale) was empirically derived on the basis of item responses that differentiated stutterers from nonstutterers. This scale was further refined by eliminating items that, in two additional groups of subjects, failed to demonstrate significant correlation with the dichotomy of stutterer versus nonstutterer. Observed relationships between S-scale scores and self- and clinician-ratings of stuttering severity, self-ratings of improvement since beginning therapy, and self-ratings and self-descriptions of reactions to social conversation suggest that the S-scale does provide information about attitudes of stutterers toward interpersonal communication. The scores obtained on this scale are related to other criterion measures of interest to the speech pathologist, and the method by which the scale was derived appears to be a useful one. (Author)

ABSTRACT 21052

EC 02 1052 ED N.A.
Publ. Date Dec 69 7p.
Besozzi, Thomas E.; Adams, Martin R.
The Influence of Prosody on Stuttering Adaptation.
EDRS not available
Journal of Speech and Hearing Research; V12 N4 P818-24 Dec 1969
Adapted From Besozzi's M. A. Thesis, Kent State University. Paper Presented at National Convention Of the American Speech and Hearing Association (44th, Denver, November 15-18, 1968).

Descriptors: exceptional child research; speech handicapped; stuttering; oral reading; speech improvement; speech therapy

Recently, Wingate proposed a two-factor theory to explain stuttering adaptation. His first factor consists of the stutterer's psychophysiological adaptation to a situation. He designated prosodic (practice) variable as the second factor. For Wingate, prosodic adaptation involves the stutterer's becoming more practiced at making transitional articulatory movements and coordinating articulation and phonation. If such is true, then it logically follows that the more oral reading practice allowed the stutterer, the more he should adapt. This hypothesis was tested in two conditions. The Control Condition consisted of five consecutive oral readings of a prose passage. In the Experimental Condition a matched passage was read orally on Trials 1 and 5 and silently on Trials 2, 3, and 4. The silent readings were introduced to limit oral reading practice ahd hence prosodic

adaptation. Statistically significant adaptation occurred under both conditions. However, significantly more adaptation was evident in the condition involving the greatest number of oral reading trials. (Author)

ABSTRACT 21058

EC 02 1058 ED N.A.
Publ. Date Dec 69 10p.
Wright, Virginia and Others
A Task for Evaluation of Articulation Change: III. Imitative Task Scores Compared with Scores for More Spontaneous Tasks.
Kansas University, Kansas City, Medical Center
EDRS not available
Journal of Speech and Hearing Research; V12 N4 P875-84 Dec 1969

Descriptors: exceptional child research; speech handicapped; articulation (speech); imitation; learning experience; speech tests; speech therapy

Nineteen subjects with consistent misarticulations of at least one phoneme were provided with remedial speech instruction. Thirty-item imitative sound production tasks were administered on three occasions prior to instruction, once before each lesson, and one month after the final lesson. Thirty-item talking tasks were obtained four times: prior to instruction, at a given midpoint, before the final lesson, and 1 month after the final lesson. A 30-item reading task was administered at one point during the study. The subjects were grouped according to a criterion level established for performance on the imitative task. Comparisons were made both within and between groups. These comparisons concerned articulation change as demonstrated by subjects' performances on the three tasks. Subjects made articulation improvement on the imitative task. They made less improvement on the reading task and much less improvement on the talking task. (Author)

ABSTRACT 21065

EC 02 1065 ED N.A.
Publ. Date 69 9p.
Weiner, Adeline E.
Speech Therapy and Behavior Modification: A Conspectus.
EDRS not available
Journal of Special Education; V3 N3 P285-93 Fall 1969

Descriptors: exceptional child education; speech therapy; behavior change; literature reviews; educational theories; research; operant conditioning; reinforcement; stuttering; speech handicapped

A survey of literature is presented concerning the application of psychological learning theories to the systematic treatment of speech and language problems through behavioral strategies. Suggested readings include theoretical concepts involved in classical and instrumental learning, major research efforts in the field of speech disorders, and descriptions of techniques for the management of specific deficits. Readings on background, history, and terminology are noted, and literary references about specific categories of speech disorders are provided. (RD)

ABSTRACT 21718

EC 02 1718 ED N.A.
Publ. Date Feb 70 5p.
Webster, Ronald L. and Others
Changes in Stuttering Frequency as a Function of Various Intervals of Delayed Auditory Feedback.
Hollins College, Virginia, Department of Psychology
Office of Education (DHEW), Washington, D.C.
EDRS not available
OEG-7-8290
Journal of Abnormal Psychology; V75 N1 P45-9 Feb 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech improvement; feedback; delayed auditory feedback

Stuttering frequency was investigated as a function of various intervals of continuously presented delayed auditory feedback (DAF). Five different intervals of DAF were presented to six severe stutterers while they read aloud. Results indicated that the continuous presentation of DAF significantly reduced stuttering frequency. Fluency enhancement was generally greatest during the shortest DAF intervals tested. No evidence was found for the carry-over of fluency generated by DAF into the period immediately following Ss' experience on DAF. The results were interpreted as being consistent with a view that stuttering is based on a defect in the processing of auditory feedback. (APA)

ABSTRACT 21724

EC 02 1724 ED N.A.
Publ. Date Feb 70 5p.
Bourdon, Karen H.; Silber, David E.
Perceived Parental Behavior among Stutterers and Nonstutterers.
George Washington University, Washington, D. C., Department of Psychology
EDRS not available
Journal of Abnormal Psychology; V75 N1 P93-7 Feb 1970

Descriptors: exceptional child research; speech handicapped; stuttering; perception; student attitudes; parents; parent influence

In this study, the perceptions of parental behavior of 24 stuttering children in public school settings were compared to those of 24 of their classmates. It was hypothesized that the stutterers would perceive their mothers as more dominating, controlling, and overprotective than the nonstutterers, and would describe their fathers as more lax and retiring. Contrary to expectations, there were no discernible differences between the two groups, nor were there differences in perceptions between the 10 mildest and 10 most severe stutterers. The results were discussed in terms of the light they throw on previous descriptions of stutterers' parents; it was hypothesized that general personality functioning of the parents was probably of lesser importance than specific, albeit unwitting, reinforcing behaviors. (APA)

ABSTRACT 21768

EC 02 1768 ED 035 147
Publ. Date Aug 69 85p.
Harrison, Robert J.
A Demonstration Project of Speech Training for the Preschool Cleft Palate Child. Final Report.
Miami University, Coral Gables, Florida, School of Medicine
Office of Education (DHEW), Washington, D.C., Bureau of Education for the Handicapped
EDRS mf,hc
OEG-2-6-061101-1553
BR-6-1101

Descriptors: exceptional child research; speech handicapped; cleft palate; speech therapy; preschool programs; parent participation; language development; speech improvement; speech therapists; program evaluation; speech evaluation; articulation (speech); case studies (education)

To ascertain the efcacy of a program of language and speech stimulation for the preschool cleft palate child, a research and demonstration project was conducted using 137 subjects (ages 18 to 72 months) with defects involving the soft palate. Their language and speech skills were matched with those of a noncleft peer group revealing that the cleft group was significantly inferior in receptive and expressive language skills. The program consisted of stimulation in which the mother participated with the child for 1 hour each week; during the period the clinician worked directly with the child, counseled the mother and directed her participation, and observed the mother in language and speech stimulation. The results of the program indicated significantly better progress by those involved in the program, compared to a control group, in both language skills and speech skills. By the end of the program the children involved had skills commensurate with their chronological age. Appendixes and extensive tables of results are included. (JM)

ABSTRACT 21794

EC 02 1794 ED N.A.
Publ. Date Jun 66 13p.
Marge, Dorothy Kunsevilch
The Social Status of Speech Handicapped Children.
EDRS not available
Journal of Speech and Hearing Research; V9 N2 P165-77 Jun 1966

Descriptors: exceptional child research; speech handicapped; parent attitudes; interpersonal relationship; social status; speech skills; social relations; playground activities; peer acceptance

Social position and parent attitudes were studied in 72 third-graders, 36 of whom were speech handicapped. Children and teachers completed sociograms; parents responded to questionnaires. Results indicated that speech handicapped children tended to hold lower social positions than normal speaking children in certain

interpersonal relationships, ranking significantly lower in the areas of study and work activity and desirability as a dinner guest. In other areas of playground activity and general speaking ability, there were no significant differences between the groups. Parents of the two groups did not differ in attitudes toward children with defective speech, although parents of speech handicapped children placed a greater emphasis on the importance of good speech. It was also found that parents perceived speech disorders as less handicapping than other types of disabling conditions. (Author/MK)

ABSTRACT 21855

EC 02 1855 ED N.A.
Publ. Date Feb 70 9p.
Ringel, Robert L. and Others
Some Relations Between Orosensory Discrimination and Articulatory Aspects of Speech Production.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N1 P3-11 Feb 1970

Descriptors: exceptional child research; speech handicapped; articulation (speech); sensory experience; tactual perception; sensory training; speech evaluation

A new test of oral form discrimination was used with 60 children with disorders of articulation. Subjects were required to decide whether two successively presented forms were the same or different by holding them in their mouths. Subjects with articulatory defects made more errors than controls with normal speech patterns. With two exceptions, significant differences were found to support the interpretation that discrimination errors increased as a function of severity of articulation. Additional conclusions regarding within and between class comparisons are presented. (RJ)

ABSTRACT 21861

EC 02 1861 ED N.A.
Publ. Date Feb 70 11p.
Faircloth, Marjorie A.; Faircloth, Samuel R.
An Analysis of the Articulatory Behavior of a Speech-Defective Child in Connected Speech and in Isolated-Word Responses.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N1 P51-61 Feb 1970

Descriptors: exceptional child research; speech handicapped; articulation (speech); language skills; spectrograms; phonetics; electronic equipment; connected discourse

The articulatory behavior of a speech defective 11 year old male was investigated as it occurred in connected speech and in isolated-word productions. Measurable differences were found for each word analyzed under the two kinds of production. Results indicated that analysis of connected speech describes a person's habitual articulatory behavior more appropriately than single word testing. (RJ)

ABSTRACT 22293

EC 02 2293 ED 024 694
Publ. Date Jul 67 105p.
Wepman, Joseph M.; Morency, Anne S.
School Achievement as Related to Developmental Speech Inaccuracy. Final Report.
Chicago University, Illinois
Ofce of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEC-4-10-006
BR-5-0398

Descriptors: exceptional child research; speech handicapped; academic achievement; articulation (speech); auditory discrimination; enunciation improvement; grade 1; language research; reading achievement; speech skills; speech tests; speech therapy

A study, at the University of Chicago, of 177 unselected children (an entire first-grade class of normal intelligence, of common ethnic background, and within 6 months of their sixth birthday) was made to determine whether those children with speech inaccuracies consistent enough to qualify them for speech therapy would achieve in their school subjects as well as children having no speech inaccuracies; whether students receiving speech therapy (offered to half of the speech inaccuracy group) improved their school achievement or their articulation accuracy acquisition more than those not receiving therapy; and whether a significant relationship existed between perceptual-modality factors and either school achievement or articulation. The study revealed no difference in school achievement between children who were considered to be in need of speech therapy and those who were not; no difference in school achievement whether a child had therapy or not; and no difference in improvement in articulation whether a child had speech therapy or not. A low but statistically significant relationship was found between the perceptual abilities and both articulation and school achievement. (Author/LH)

ABSTRACT 22374

EC 02 2374 ED N.A.
Publ. Date Aug 67 7p.
Goldman, Ronald; Fristoe, Macalyne
The Development of the Filmstrip Articulation Test.
EDRS not available
Journal of Speech and Hearing Disorders; V32 N3 P256-62 Aug 1967

Descriptors: exceptional child research; speech handicapped; articulation (speech); test construction; visual measures; filmstrips; speech therapy; speech evaluation; tests; Filmstrip Articulation Test

The Filmstrip Articulation Test, consisting of 35 pictures of familiar objects, was developed for a rear projection viewer. It and the Hejna Developmental Articulation Test were given to 29 children, including normal, speech delayed, and cerebral palsied children from 3 to 6 years of age and mentally retarded children from 8 to 11. The Filmstrip Test was quicker to administer, elicited more sounds spontaneously, and was preferred by 27 of the subjects. (MK)

ABSTRACT 22887

EC 02 2887 ED 040 539
Publ. Date Jul 68 27p.
Coleman, Thomas; Langberg, George
An Automated and Programed Laboratory for Instruction in the Areas of Speech and Communication. Final Report.
Ossining Public Schools, New York
New York State Education Department, Albany, Division of Research
EDRS mf,hc

Descriptors: exceptional child education; speech handicapped; speech therapy; programed instruction; autoinstructional methods; program evaluation; public schools; articulation (speech); educational methods; exceptional child research

An experimental public school speech therapy program is described, which offers automated, programed instruction in sound production and auditory training. The experiment includes self-teaching methods, as well as utilization of paraprofessional personnel under the supervision of a qualified speech therapist. Although the automated program was presented as a supplement to traditional speech therapy methods, an effort was made to evaluate its contribution to the accomplishment of therapy goals. Utilizing 28 subjects, the investigators compared articulation test scores of those who had received only traditional therapy with those who had received both traditional and automated therapy. Results indicated a significant improvement in articulation with those students who received combined treatment. Although the study was limited, it was felt that automated programing may represent an important instrumentality for accomplishing school therapy objectives. (JB)

ABSTRACT 23077

EC 02 3077 ED N.A.
Publ. Date Jul 70 4p.
Lawrence, Joyce R.; Potter, Robert E.
Visual Motor Disabilities in Children with Functional Articulation Defects.
EDRS not available
Journal of Learning Disabilities; V3 N7 P355-8 Jul 1970

Descriptors: exceptional child research; learning disabilities; speech handicapped; perceptual motor learning; articulation (speech); motor development; perceptual development

The investigation attempted to determine if the presence of visual-motor integration disabilities, as measured by the Developmental Test of Visual Motor Integration, was greater in preschool and primary grade children having functional articulation defects than in those without articulation defects--that is, normal speakers. Statistical analysis of the data revealed that the subjects possessing functional articulation defects showed a

significantly higher degree of visual-motor integration disability than did the controls. Other statistical comparisons revealed that the male subjects with functional articulation defects performed significantly less well than did the control males on the Developmental Test of Visual Motor Integration. However, this difference was not found between the female subjects and female controls. A positive correlation was found to exist between visual-motor integration ages and the chronological and mental ages of the sample population. (Author)

ABSTRACT 23099

EC 02 3099 ED N.A.
Publ. Date Aug 70 4p.
Martin, J. E.
The Signal Detection Hypothesis and the Perceptual Defect Theory of Stuttering.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N3 P252-5 Aug 1970

Descriptors: exceptional child research; speech handicapped; stuttering; feedback; auditory perception

The purpose of this paper is to propose a theory concerning the nature of the perceptual defect involved in stuttering. The theory shows how certain kinds of anxiety could be predicted to block or delay the feedback loop in terms of a psychological theory of perception. This theory is briefly outlined. With respect to a model of speech production it is suggested that the comparator receives an input from other central processors which specifies the criterion in terms of which the feedback will be evaluated. At the moment of stuttering it is hypothesized that the criterion becomes excessively conservative and the decision time in the comparator is slightly delayed--similar to the distortion of speech of normals under DAF. The etiology of some kinds of stuttering is discussed in this context. This theory must be viewed primarily as a potential departure for new empirical research. (Author/GD)

ABSTRACT 23305

EC 02 3305 ED N.A.
Publ. Date 70 5p.
Silverman, Franklin H.
Course of Nonstutterers' Disfluency Adaptation During 15 Consecutive Oral Readings of the Same Material.
National Institute for Neurological Diseases and Stroke, Washington, D. C.
EDRS not available
TI-NG-5479
Journal of Speech and Hearing Research; V13 N2 P382-6 Jun 1970

Descriptors: exceptional child research; speech handicapped; stuttering; language fluency; response mode; oral reading

Each of 20 adult male nonstutterers read the 331-word Rainbow Passage 15 consecutive times. The mean number of instances of disfluency during each of the 15 readings was determined. The initial course of the nonstutterers' adaptation was reflected in a negatively accelerating curve. The greatest amount of adaptation occurred on the first repetition, and most of the adaptation occurred in the early readings. The curve reached a minimum on the ninth reading. This suggests that the course of nonstutterers' disfluency adaptation during oral reading possesses the four characteristics considered by Wingate (1966) to be descriptive of the course of stutterers' adaptation. Several implications are discussed. (Author)

ABSTRACT 23332

EC 02 3332 ED N.A.
Publ. Date 70 13p.
Prins, David
Improvement and Regression in Stutterers Following Short-Term Intensive Therapy.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N2 P123-35 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech theapy; speech improvement; language patterns; communication problems; followup studies; success factors

A study concerned with the effects of a specific treatment program upon stutterers was undertaken with the following objectives: the description of improvement and regression as a function of different problem areas which contribute to stuttering severity, an evaluation of the relationship between improvement and regression, and an evaluation of regression as a function of time after the termination of therapy. The subjects were 94 male stutterers from ages 8 through 21 at The University of Michigan Speech and Hearing Camp. The length of time since therapy had ended ranged from 6 months to 3 1/2 years. Subjects filled out a self-administered questionnaire about their stuttering. An average of 67% of responses on improvement after therapy indicated significant and lasting improvement but 33% said they had regressed to varying degrees. The study, which used the stutterer's own evaluation of his improvement and regression following therapy, facilitated the evaluation of a specific treatment program and suggested future modifications of the program. (GD)

ABSTRACT 23338

EC 02 3338 ED N.A.
Publ. Date 70 7p.
Weber, Jack L.
Patterning of Deviant Articulation Behavior.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N2 P135-41 May 1970
Paper Presented at the New York State Speech and Hearing Association Convention (May, 1969).

Descriptors: exceptional child research; speech handicapped; articulation (speech); linguistic patterns; phonologic units; phonetic transcription; auditory discrimination; speech therapy

The phonologic behavior of 18 subjects was studied to discover patterns of deviant articulation. The subjects all had normal oro-motor structures, normal hearing acuity, a record of at least 20 errors on the 50-item Templin-Darley Screening Test for Articulation, and were between the ages of 5 and 10. At least one deviant phonologic pattern, (defined as occurring when one or more relationships are discovered between phonemes that have at least one major articulation feature in common) was found for each subject, with most subjects exhibiting either two or three. No two subjects exhibited exactly the same patterns. Rather than the traditional approach to speech therapy, treatment was based on two principles: an entire pattern or articulation category was taught at once instead of one sound at a time, and the child was taught to consciously contrast the incorrect feature with the correct feature throughout all stages of therapy. (Author/GD)

ABSTRACT 23367

EC 02 3367 ED N.A.
Publ. Date Jun 70 6p.
Cooper, Eugene B. and Others
The Effect of the Verbal Stimulus Words Wrong, Right, and Tree on the Disfluency Rates of Stutterers and Nonstutterers.
EDRS not available
Journal of Speech and Hearing Research; V13 N2 P239-44 Jun 1970

Descriptors: exceptional child research; speech handicapped; stuttering; language fluency; verbal stimuli; response mode

The effects of the verbally presented stimuli wrong, right, and tree on the frequency of disfluencies during oral reading for 14 stutterers and 14 nonstutterers were studied. No differences were found between the three stimulus words with respect to their effect on the disfluency rate of either subject group. A decrease in the disfluency rate of the stutterers was observed during the presentation of all three stimulus words. (Author)

ABSTRACT 23368

EC 02 3368 ED N.A.
Publ. Date Jun 70 9p.
Stark, Rachel E.; Pierce, Bruce R.
The Effects of Delayed Auditory Feedback on a Speech-Related Task in Stutterers.
EDRS not available
Journal of Speech and Hearing Research; V13 N2 P245-53 Jun 1970
Based on A Ph.D. Dissertation, University of Oklahoma Medical Center, Oklahoma City.

Descriptors: exceptional child research; speech handicapped; stuttering; adults; feedback; electronic equipment; response mode; behavior patterns

The responses of 15 adult stutterers and 15 matched nonstutterers were compared on a patterned syllable-repetition task under various auditory feedback conditions. The feedback signals were clicks activated by an electro-mechanical device at the time of lip closure. They were either synchronous (SAF) or delayed (DAF) or a combination (SAF/DAF). SAF was presented by bone conduction

at a 40-dB sensation level, DAF by binaural air conduction with a delay of 140 or 200 msec, at sensation levels of 0, 10, 20, and 30 dB in DAF alone and at sensation levels of 40, 50, 60, and 70 dB in the SAF/DAF combination. Performances were evaluated in terms of pattern duration, lip-closure duration, and number of pattern errors. Stutterers and nonstutterers responded similarly to the feedback conditions. Three differences were found: during SAF alone, stutterers showed greater duration of lip closure; there were non-systematic differences between stutterers and nonstutterers in duration of lip closure during DAF and SAF/DAF conditions; and with increased intensity of DAF, stutterers showed a greater increase in number of pattern errors. (Author)

ABSTRACT 23375

EC 02 3375 ED N.A.
Publ. Date 70 13p.
Lubker, James F. and Others
Nasal Airflow Characteristics During Speech in Prosthetically Managed Cleft Palate Speakers.
National Institute of Dental Research, Bethesda, Maryland
EDRS not available
DE-00853
Journal of Speech and Hearing Research; V13 N2 P326-38 Jun 1970

Descriptors: exceptional child research; speech handicapped; cleft palate; prostheses; air flow; articulation (speech)

The study was designed to provide descriptive aerodynamic articulatory data regarding prosthetically managed cleft palate speakers. Results suggest that: prosthetic management of cleft palate may limit the range of velopharyngeal opening to the point where the speaker may have both nasal and denasal speech characteristics; small amounts of nasal airflow may be present without listeners labeling that speech defective; nasal airflow increases as oral constriction increases; voiceless consonants are produced with greater nasal airflow than are voiced cognates; prosthetically managed cleft palate speakers demonstrated more nasal airflow for voiceless fricatives than voiceless plosives, and more for voiced plosives than voiced fricatives; the duration over which a consonant must be sustained may be more closely related to relative speech defectiveness than is the required peak pressure for that consonant; and prosthetically managed cleft palate speakers with borderline closure appear less consistent in nasal airflow rate than speakers with either very good or very poor closure. (Author)

ABSTRACT 23378

EC 02 3378 ED N.A.
Publ. Date 70 9p.
Young, Martin A.
Anchoring and Sequencing Effects for the Category Scaling of Stuttering Severity.
Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS not available
RD-1721
Journal of Speech and Hearing Research; V13 N2 P360-8 Jun 1970

Descriptors: exceptional child research; speech handicapped; stuttering; classification; speech therapy; speech evaluation

Equal-appearing interval scaling is frequently used to measure stuttering severity. The scale values generated by this procedure are known to be affected by a variety of extraneous conditions. In particular, anchoring and sequence effects are known to result in predictable observer biases. These influences are demonstrated for the category scaling of stuttering severity, and suggestions are made for their experimental control. (Author)

ABSTRACT 23397

EC 02 3397 ED N.A.
Publ. Date Apr 70 13p.
Neaves, Alison I.
To Establish A Basis for Prognosis in Stammering.
EDRS not available
British Journal of Disorders of Communication; V5 N1 P46-58 Apr 1970
Abridged Version of A Thesis Presented for the Fellowship of the College of Speech Therapists.

Descriptors: exceptional child research; speech handicapped; stuttering; motor development; psychomotor skills; lateral dominance; intelligence; personality; motor reactions; prognostic tests

A study was undertaken to determine which cases of stammering are most likely to respond to treatment. The sample of 127 boys and 38 girls was divided into two groups: Group A (those considered to have responded successfully to therapy); and Group B (those who did not). The groups were compared in areas of motor impairment, lateral dominance, intelligence, and personality adjustment. Results showed poor neuromuscular coordination as the basic causative factor in stammering. Other important factors were found in the history of speech development of the stammerer and his close relatives, the nature of the stammer onset, intelligence, and some dimensions of personality. It is suggested that methods of improving neuromuscular patterns be considered for treatment. It was concluded that it should be possible to form a rational prognosis for about 80% of all stammerers. (GD)

ABSTRACT 23399

EC 02 3399 ED N.A.
Publ. Date Apr 70 10p.
Bloodstein, Oliver
Stuttering and Normal Nonfluency--A Continuity Hypothesis.
EDRS not available
British Journal of Disorders of Communication; V5 N1 P30-39 Apr 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech skills; child language; language development; language fluency; speech habits; theories

The relationship between the speech interruptions of children who are ordinarily referred to as stutterers and those of children who are regarded as normal speakers is discussed. The terms stuttering and nonfluency were replaced by more descriptive terms: part-word repetition, word repetition, sound prolongation, and forcing. Research findings were then reviewed on these reactions as they have been observed in young children regarded as stutterers and those not regarded as stutterers. It was found that each of the above features of disfluent speech is found more frequently in young stutterers than in young nonstutterers, and each occurs in readily discernible amounts in both groups. Little research has been done on the distribution of these features in the speech sequence or their frequency. The hypothesis is suggested that there is a basic continuity between forms of early stuttering and some features of early normal nonfluency. (GD)

ABSTRACT 23401

EC 02 3401 ED N.A.
Publ. Date Apr 70 6p.
McCool, J.
Psychopathogenic Non-Fluency.
EDRS not available
British Journal of Disorders of Communication; V5 N1 P16-21 Apr 1970

Descriptors: exceptional child research; speech handicapped; stuttering; intelligence level; personality; social adjustment; neurological defects; etiology; psycholinguistics; psychological characteristics

Reviewed is a study undertaken to provide a basis for prognosis in stammering. The importance of cognitive functioning and personality as causative factors of stammering is considered. The possible psychological factor of intelligence is discussed with reference to a study by the Ayrshire Child Guidance Service. A statistically significant difference was found in intelligence between those who responded to treatment and those who did not. Stammering as a result of a traumatic experience, conditioning and habit formation, and poor listener behavior is considered to be more of a theoretical construct than the outcome of valid experiments. Psychoanalytic theories, including interpersonal relationships and the social adjustment of the stammerer, are reviewed. The Ayrshire test measured 14 factors of stutterers aged 13-18 years. Nine factors showed a deviation from the mean, though the difference was not statistically significant. It was concluded that by themselves, the psychogenic factors mentioned seemed to be an insufcient explanation, and that there must be a basic neurological predisposition to stammer. (GD)

ABSTRACT 23402

EC 02 3402 ED N.A.
Publ. Date Apr 70 10p.
Wyke, Barry
Neurological Mechanisms in Stammering: An Hypothesis.
EDRS not available
British Journal of Disorders of Communication; V5 N1 P6-15 Apr 1970
Address Delivered to the Scottish Area

Refresher Course in Speech Therapy, Ayr, Scotland, March 27, 1969.

Descriptors: exceptional child research; speech handicapped; stuttering; neurological defects; neurological organization; speech skills; physiology; voice disorders; theories; etiology

The address includes some tentative proposals regarding the mechanisms that may underly the production of stammering which have emerged from experimental work on the neurology of phonation. Three reflex systems in the larynx, which play a critical part in the act of speaking, are: the laryngeal mucosal mechanoreceptor reflexes, the laryngeal myotatic mechanoreceptor reflexes, and the laryngeal articular mechanoreceptor reflexes. It is hypothesized that two distinct varieties of stammering result from these reflexes: voluntary or cortical stammering, resulting from abnormally slow or inaccurate voluntary presetting of the laryngeal and respiratory musculature; and reflex stammering, the result of inefficient or disorganized reflex maintenance of this preset pattern of muscle tone. From this hypothesis stammering is regarded as a manifestation of phonatory ataxia, resulting from temporal dysfunction in the operations of the voluntary and/or reflex mechanisms. (GD)

ABSTRACT 23406

EC 02 3406 ED N.A.
Publ. Date May 70 5p.
Greenberg, Janet Berson
The Effect of a Metronome on the Speech of Young Stutterers.
EDRS not available
Behavior Therapy; V1 N2 P240-44 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; language fluency; pacing; speech skills

The influence of a metronome on the speech of stutterers aged 9-11 years is studied. The effect of telling the subject to pace his speech with the metronome is compared with having the metronome in the auditory background without instructions to pace. The subjects were 40 Negro boys (20 who received stuttering therapy, and 20 non-stutterers, who formed the control group. The subjects were asked to describe toys while speaking into a tape recorder with and without the metronome and pacing instructions. Tables show statistical comparisons for differential rates of speech. Boys identified as stutterers showed a significant decrease in rate of dysfluency when the metronome was used. The differences between the experimental subjects instructed to pace their speech and those given no instructions was not significant. Possibilities for speech therapy are discussed. It is suggested that a metronome could be effectively used without telling the child why, and thus without calling the child's attention to his impediment. (GD)

ABSTRACT 23442

EC 02 3442 ED 041 412
Publ. Date Jan 70 88p.
Girardeau, Frederic L., Ed.; Spradlin, Joseph E., Ed.
A Functional Analysis Approach to Speech and Language. ASHA Monographs, Number 14.
American Speech and Hearing Association, Washington, D. C.
EDRS mf,hc
ASHA Monographs, American Speech and Hearing Association, 9030 Old Georgetown Road, Washington, D. C. 20014 ($4.00).

Descriptors: exceptional child research; speech handicapped; speech therapy; operant conditioning; aurally handicapped; reinforcement; television; articulation (speech); minimally brain injured; behavior change; speech pathology

Theory and laboratory research in operant behavior are applied to clinical practice in speech pathology. Introductory material summarizes the principles of operant conditioning as related to speech therapy. Clinical application is presented in the following areas: reinforcing properties of a television presented listener; reduction of reading and speaking rates; stimulus control of phoneme articulation; increase of functional speech by a brain-injured child; establishing and maintaining echoic speech by a nonverbal child; and deceleration of inappropriate vocal behavior by a hard of hearing child. A concluding chapter deals with implications of a functional approach to speech pathology and audiology. (JB)

ABSTRACT 23481

EC 02 3481 ED N.A.
Publ. Date May 70 4p.
Massengill, Raymond, Jr. and Others
An Analysis of Articulation Following Partial and Total Glossectomy.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N2 P170-3 May 1970

Descriptors: exceptional child research; speech handicapped; articulation (speech); case records; communication skills; speech therapy; glossectomy effects

The speech of three glossectomy patients was studied and compared in regard to the amount of the tongue that was surgically removed. All three patients were given the Templin-Darley Articulation Test and the closed set response articulation test (House). The first patient had had approximately 25% of his tongue removed and made only one error on the closed-set response test. Fifty percent of the second patient's tongue was removed. His speech was intelligible and he made three errors. The last patient had approximately 95% of his tongue removed and was still able to communicate fairly well. He made 102 errors on the Templin-Darley and 13 errors on the closed-set response test. It was concluded that speech became increasingly distorted as larger percentages of the tongue were removed. Though there was some speech distortion, all three patients had little trouble with verbal communication. (GD)

ABSTRACT 23493

EC 02 3493 ED N.A.
Publ. Date May 70 12p.
Daly, David A.; Frick, James V.
The Effects of Punishing Stuttering Expectations and Stuttering Utterances: A Comparative Study.
EDRS not available
Behavior Therapy; V1 N2 P228-39 May 1970

Descriptors: exceptional child research; speech handicapped; stuttering; negative reinforcement; speech therapy; adults

The effects of contingent shock on signaled stuttering expectancies and/or stuttering utterances were studied in 36 adult male stutterers. Each subject participated in only one of three different punishment conditions. Each condition consisted of three segments: Base Rate, Training, and Recovery. Punishment was administered only during the Training segments. Electroshock was delivered contingent upon signaled expectancies to stutter in one condition; in a second condition, shock was administered for emitted stuttering utterances; and in the third condition, the effect of punishment for both signaled expectancies and stuttered utterances was studied. The general findings were: punishment of signaled expectancies effected only a moderate reduction in stuttering expectancies; stuttering utterance contingent shock effected a significant decrease in stuttering; and the combined punishment procedure effected significant reductions in both signaled expectancies and stuttering utterances, though the combined punishment procedure did not effect a more immediate or a more significant reduction in stuttering than the stuttering utterance contingent punishment procedure. (Author)

ABSTRACT 23575

EC 02 3575 ED 042 308
Publ. Date May 70 97p.
Bell, Dorothy Mays; Sanders, Edwina
An Investigation of an Individualized Approach to Evaluating, Grouping, and Planning Therapy for Children with Functional Articulation Problems in the First and Second Grades in a Public School System. Final Report.
Texas Christian University, Fort Worth; Fort Worth Independent School District, Texas
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-7-9-530035-0093(010)
BR-9-G-035

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; grouping (instructional purposes); auditory perception; elementary school students

A study was conducted to investigate methods of grouping children in grades 1 and 2 in a speech and hearing therapy program, and to determine the prevalence of certain auditory skills and deviant swallowing behavior associated with articulation problems. A screening test of articulation identified 255 control

and 255 experimental subjects. A test battery was administered, on the basis of which six therapy groups were formed. Statistical analysis of data collected from a later administration of tests showed the grouping of children with articulation problems, and the use of pre-professionals (graduate students in speech and hearing pathology) to be effective procedures. Five of the groups achieved mean gain of articulation scores greater than that of the control groups. Of the 12 variables studied, nine achieved significant gain by the experimental samples in any group. Association of auditory deviations with articulation problems was confirmed, but deviant swallowing behavior was not a factor. (KW)

ABSTRACT 23595

EC 02 3595 ED N.A.
Publ. Date Mar 70 5p.
Webster, Ronald L.; Dorman, Michael F.
Decreases in Stuttering Frequency as a Function of Continuous and Contingent Forms of Auditory Masking.
EDRS not available
Journal of Speech and Hearing Research; V13 N1 P82-6 Mar 1970

Descriptors: exceptional child research; speech handicapped; stuttering; speech therapy; speech skills; behavior change; motor reactions

This experiment examined the effects of continuous and contingent white noise masking upon the speech of 10 stutterers. The methodology equated the frequency of masking opportunities during noise onset made contingent upon phonation, and noise cessation made contingent upon phonation. A continuous noise condition and a no-noise control condition were also included. All noise conditions produced significantly less stuttering than the no-noise control condition. The three masking conditions yielded approximately the same reductions in the frequency of stuttered responses. Fluency enhancement by the various masking conditions could possibly be explained by reflex functions of the middle ear muscles. (Author)

ABSTRACT 23600

EC 02 3600 ED N.A.
Publ. Date Mar 70 8p.
Toomey, George L.; Sidman, Murray
An Experimental Analogue of the Anxiety-Stuttering Relationship.
EDRS not available
Journal of Speech and Hearing Research; V13 N1 P122-9 Mar 1970

Descriptors: exceptional child research; speech handicapped; stuttering; anxiety; psychological patterns; conditioned response; reading habits; reading speech; electronic equipment

Four adult subjects who stuttered were exposed to the Estes-Skinner conditioned anxiety paradigm. After buzzer-shock pairings were introduced, instances of stuttering and reading rates were affected in different directions. Different patterns were noted among individual subjects. In a situation designed to be anxiety arousing, stutterers reacted in different ways. (Author)

ABSTRACT 23604

EC 02 3604 ED N.A.
Publ. Date Mar 70 5p.
Silverman, Franklin H.
A Note on the Degree of Adaptation by Stutterers and Nonstutterers During Oral Reading.
EDRS not available
Journal of Speech and Hearing Research; V13 N1 P173-7 Mar 1970

Descriptors: exceptional child research; speech handicapped; stuttering; adaptation level theory; speech improvement; language fluency; behavior patterns

Group adaptation data reported for stutterers and nonstutterers in three studies were reanalyzed using a proportional adaptation measure. In none of the studies did the stutterers adapt proportionally to a greater degree than the nonstutterers. This suggests that the greater slope observed for stutterers' than for nonstutterers' adaptation curves in these studies was primarily a function of the difference between groups in frequency of disfluency. (Author)

ABSTRACT 23606

EC 02 3606 ED N.A.
Publ. Date Mar 70 9p.
Shipp, Thomas
EMG of Pharyngoesophageal Musculature During a Laryngeal Voice Production.
EDRS not available
Journal of Speech and Hearing Research; V13 N1 P184-92 Mar 1970

Descriptors: exceptional child research; speech handicapped; voice disorders; electronic equipment; biomedical equipment; measurement techniques; motor reactions; Electromyography (EMG)

EMG activity from the inferior constrictor and cricopharyngeus muscles and the voice signal were obtained from 18 laryngectomized male subjects as they produced isolated vowels using alaryngeal phonation. To inflate the esophagus prior to phonation, all subjects but one demonstrated a similar muscle pattern: either one or both muscles studied showed a burst of activity at the moment of inflation. The remaining subject had a muscle pattern during inflation that was identical to a post-laryngectomy swallowing pattern. No typical or modal muscle patterns were found for subjects during the phonatory portion of the alaryngeal voice task. Consistency of pattern within each subject was extremely high during a given procedure and on repeated procedures. The findings suggested that poor talkers had less control of differential muscle contraction than did the adequate talkers and that each laryngectomized talker adopts a phonatory method that is unique to him and consistent with his postoperative anatomy and physiology. (Author)

ABSTRACT 23613

EC 02 3613 ED N.A.
Publ. Date Aug 70 5p.
Marshall, Robert C.
The Effects of Response Contingent Punishment upon a Defective Articulation Response.
EDRS not available
Journal of Speech and Hearing Disorders; V35 N3 P236-40 Aug 1970

Descriptors: exceptional child research; speech handicapped; articulation (speech); speech therapy; conditioned stimulus; negative reinforcement

The effective use of a response contingent punishing stimulus (electric shock) in the amelioration of an incorrect articulation response is described. The patient was a 20-year-old white male who complained that his /s/ and /z/ interdental lisp problem kept him from attending a special school. Following several ear training sessions, finger electrodes from a Grason-Stadler Psychogalronometer were attached to the third and fourth fingers of the patient's left hand. The shock was introduced during the second period of each session. The first and third parts of the session the clinician merly counted the errors. After eight sessions the error rate was so low therapy was discontinued. Follow-up visits showed the patient maintained a low error rate. The clinician used shock because rapid correction of the lisp was important to the patient for vocational advancement, the speech disturbance was simple, and the patient understood the reasons for the shock. For certain clients, with certain conditions, response contingent punishment can be useful. (GD)

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